DOCUMENT RESUME

ED 388 777 CE 070 160

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TITLE	A Standardized Certification Program for Case Managers Serving Frail Elderly Texans. Module II: Assessment and Care Plan Development.
INSTITUTION	North Texas Univ., Denton. Center for Studies in Aging.
SPONS AGENCY	Texas Higher Education Coordinating Board, Austin.
PUB DATE	95
NOTE	191p.; For modules I and III, see CE 070 159 and CE 070 161.
PUB TYPE	Guides - Classroom Use - Teaching Guides (For Teacher) (052)
EDRS PRICE	MF01/PC08 Plus Postage.
DESCRIPTORS	Adult Education; *Aging (Individuals); Behavioral Objectives; *Caseworker Approach; Caseworkers; Community Programs; Coordination; Disabilities; Frail Elderly; Higher Education; *Human Services; Integrated Services; Learning Activities; Learning Modules; Lesson Plans; Mental Health; *Needs Assessment; *Professional Continuing Education; Social Work; Supervisory Methods; Supervisory Training
IDENTIFIERS	*Case Management; *Texas

ABSTRACT

This learning module is one of three training modules that were developed for members of the Texas Gerontological Consortium for Continuing Education to use in preparing case managers working in human service professions coordinating community-based programs for frail elderly Texans. Module II deals with the following topics: assessment (role of assessment; purpose and value of elderly assessment; criteria for instrument selection; basic concepts of aging and personality, aging and intelligence, sociometric assessment, and observations/interviews; functional assessment; assessment in the public sector by case managers); age-related mental and physical changes (psychosocial aspects of disabilities, consequences of bed rest, changes in the various body systems, sensory changes, kinesthetic and vestibular senses, mental health conditions); writing a care plan; and practicum. Included in the module are the following components: estimate of time required to complete the module; a list of suggested videos; and topic outlines containing topic objectives, the information to be learned for mastery of each topic objective, 49 references, and transparency masters. (MN)

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ED 388 777

A STANDARDIZED CERTIFICATION PROGRAM FOR CASE MANAGERS SERVING FRAIL ELDERLY TEXANS

MODULE II

This project was supported by award number 55110004 from the Texas Higher Education Coordinating Board, Austin, Texas. This Carl Perkins award was designed to develop three training modules to prepare case managers working in human service professions that coordinate community-based programs for the elderly. The training material was developed for use by members of the Texas Gerontological Consortium for Continuing Education.

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1995

CE070160

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CASE MANAGEMENT: ASSESSMENT AND CARE PLAN DEVELOPMENT

MODULE II

Time Requirements of 20 Hours

Suggested Videos for this module:

- Resident Assessment: Cognitive and Sensory Functioning
- Growing Old in a New Age, Intellect, Personality, and Mental Health
- Resident Assessment: Physical Functioning (optional)
- The Sixth Sense
- Depression and the Elderly
- Detecting Dementia: Cognitive Assessment by the Home Health Care Professional
- Helping People with Dementia

TOPIC

A. COMPREHENSIVE ASSESSMENT

OBJECTIVES

AT THE COMPLETION OF THIS SESSION, THE PARTICIPANT WILL BE ABLE TO:

1. Have insight into the role of assessment as used by case managers.
2. Understand the rationale for elderly assessment.
3. Understand the value of elderly assessment.
4. Understand the criteria for instrument selection. Reliability and Validity risks.
5. Understand the basic concepts of aging and personality.
6. Understand the basic concepts of aging and intelligence.

7. Understand the basic concepts of sociometric assessment.
8. Understand the basic concepts of observation-interview.
9. Understand functional assessment. Activities of Daily Living and Instrumental Activities of Daily Living.
10. Demonstrate skills as used by public sector case managers involved with assessment.

The Role of Assessment

Throughout Module 1 emphasis was placed on the fact that for the vast majority needing long-term care community-based case management, the point of entry was through the hospital as a result of the consumer experiencing a disabling condition. Also emphasis was placed on the notion of the case manager having a working professional relationship with the hospital discharge planner. This relationship fosters the flow of information necessary for insight into functional problems the potential consumer might experience. It is critical that all providers work from the same diagnosis. This module is written to assist the case manager working with consumers whose entry point is both the hospital and the community. Practicing case managers recommend that for those coming through the hospital, a critical body of knowledge for the case manager is knowledge of the normal course of events or expected outcomes of major disabling conditions. This knowledge is critical in the development of the care plan which reflects the quantity of services needed. Examples of knowledge of outcomes are the normal healing process with a broken hip or restoration potential following a stroke.

This module uses a functional approach to assessment, particularly for those entering the system through the hospital since their limitations and disabling conditions tend to be very specific. Those entering as a result of diminished functioning in the home require the case manager to use more of a clinical approach to assessment in order to establish baseline information normally gathered in the hospital. Regardless of the point of entry, the case manager cannot fully assess the problems without knowing about the family and the tasks that they will continue to perform and what other key players will be involved such as home health, and, and or, community programs funded by persons who are Medicaid eligible.

Comprehensive clinical geriatric assessment is a multi-disciplinary science involving professionals with specialized training in their various disciplines. Much in this module is to acquaint the beginning case manager with the science and is beyond the scope of the assessment process they will be using. The case manager needs to know when to seek additional assistance and where to go should they contact a consumer whose manifestations warrant the more indepth examination of presenting problems.

The Rationale for Elderly Assessment

The crux of case management intervention is the restoration of lost functional abilities when that potential exists. The process of adapting to the environment, or of adapting the environment to the person, is especially important in geriatrics. Case management is a process that is determined by neither the specific diagnoses nor the type of living arrangement where the services are provided. The primary goal is to promote independent living as defined by the recipient of the case management efforts.

The case management team, in addressing the needs of the elderly, should not adopt a binary concept of either sickness or health; rather, it should consider an individual's state of well-being along a continuum. The goals where chronic conditions are involved are to minimize distress, optimize function, and avoid further impairments. A case management approach to geriatric care incorporates a focus on the ability to function effectively in the various aspects of life. The case management team members working with chronic problems must go beyond physical conditions and address the functional impact of the disability.

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overhead - Functional assessment examines three major life realms

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Assessment must have a stated purpose. With the elderly, referrals generally are made for one of three purposes: for the enhancement of self-care (independent living), to assist family members, or for the benefit of other providers. Frequently, more than one purpose is served through assessment. For the case manager, assessment serves the purpose of giving direction in the development of the care plan that includes the package of services needed by the consumer.

Regardless of age, case management must stress a biopsychosocial approach to all disabling conditions, whether in its cause, in its consequences, or in its treatment. One way to display a biopsychosocial approach is through a **Venn** diagram. The inner-connectedness of a person's three functional realms becomes much more significant with advanced age. The elderly tend to have chronic conditions, and chronic conditions by their very nature imply that there is no cure. Chronic conditions for persons who are older need to have all three realms addressed. Frequently for persons who are older, if they have a problem in one realm, the problems soon spread to the other two areas. The providing of any service then is always a mix of the biologic, the psychologic, and the social phenomena. The degree to which a person regains functioning after chronic illness depends on the adequacy of attention paid to all three realms. If any part of the biopsychosocial complex is not adequately addressed, chronic illness can and will result in diminished functioning and increased disability. If any of the three circles in the diagram shrink, the others must be expanded to compensate. This knowledge factor is crucial for all providers of services to the elderly. It is the interaction of these parts of the system, rather than the actions of any one of them that determines the adequacy of the outcome. Independent living, then is not confined to the practice of physicians, who are specialist with acute conditions; it is persons like you with your well rounded background in all of these areas that are well prepared to meet the needs of persons who are older with disabling conditions.

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overhead - following the onset of a disabling condition

Young persons following the onset of a disabling condition tend to experience improved functioning without benefit of all realms being addressed. The elderly are the success stories for case managers. When someone of a younger age experiences a disability, and the psychological component is not addressed, 40% experience improvement without assistance. When counseling is added, 65% experience improved functioning. For the elderly, 10% improve without counseling, therefore you can see why it is so devastating. With counseling, 65% of the elderly show improved functioning. For younger folks, counseling with a disabling improves functioning by 25% for the elderly, it is

65%. Counseling in most instances involves assisting the consumer in the adaptation process following a major life change. Case managers can most adequately perform this function.

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overhead - items to consider following onset of a disability

Older persons have a deep seated fear of ending up in a nursing home. Living independently at home is the most desired outcome following the onset of disabling conditions. To remain at home has implications for the case manager:

- **First** is the teaching of new skills to compensate for the deficit brought on by the disability.
- The **Second** major impact of a disability is on life satisfaction; sources are frequently changed. Sufficient pleasurable experiences must occur to outweigh the painful ones, whether physical or psychologic. For the elderly a disability increases the sources of pain without equally corresponding pleasure. When a disability is present in late life it frequently is accompanied by other conditions such as diminished hearing or vision. Another component of life satisfaction is that frequently there is often a loss of a sense of meaning or purpose in life following the onset of a disability. A chronic illness for the elderly seems to have a significant impact of the loss of purpose. So there are major psychological needs for the elderly following the onset of a disability.
- The **Third** major impact is on self-esteem. Self-esteem means liking yourself exactly the way you are. People of all ages and particularly the elderly who can accept and appreciate themselves after the onset of a disability are minimally handicapped by it. Self-esteem is different from life satisfaction. Self-esteem follows from an appraisal of one's self as of that moment; life satisfaction on the other hand follows from an appraisal of one's life. For those who have had a good life, the impact is less, still one must address the loss of self-esteem or the impact of the present moment.

Another role for the case manager is assisting with the development of proper coping strategies. Counseling with the

elderly involves a different family arrangement. The case manager is usually working with both the consumer and their family members of a younger generation. Families often need counseling when an older member experiences the onset of a disability. Families develop coping strategies whether they are good or bad, and when an older person has a disability, families often use more of the strategies which are often inappropriate.

The introduction of functional assessment often brings new meaning to the various aspects of assessment. Because functional ability is determined by a number of factors, the assessment process must go further and look at coexisting problems that may impact the independent living process. Functional assessment makes use of interviewing, observing, and testing a client with standard scales or instruments. The evaluation places the derived information into a lifestyle context. The clinical functional assessment goes beyond physical ability to carry out a procedure or certain tasks and considers the consumer's ability to function in the context of their home and community. Integrated functional skills define life-style and are more important than isolated skills, for it is the loss of functional skills which defines disability.

The purpose of assessment is to gain knowledge of an elderly person's assets and liabilities in as objective a fashion as possible. A comprehensive clinical assessment makes use of appropriate psychological tests, medical and mental examinations, a nursing care assessment, an intake interview, and other approaches. Functional assessment is similar to these approaches, yet broader and less profession-specific. It is an attempt to evaluate both the objective and subjective worlds through standardized methods that can be applied by people with a wide variety of backgrounds and training. A major objective is to differentiate pathological symptoms from normal concomitants of aging.

Show video, *Resident Assessment: Cognitive and Sensory Functioning*. This video is optional and at the instructors discretion. Instructor should preview to determine whether to use. Advise participants that this video reflects an institutional setting, yet makes valuable points on the subject of assessment and cognitive skills, sensory deficits and use of assessment forms.

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overhead - areas of life subject to assessment (4)

Assessment should include the client's pattern of daily life, abilities and activities of daily living, suitability and safety of the home, attitudes of caregivers, availability of emergency services, and occupational history and financial status. Comprehensive functional assessment should include an assessment of the home environment in which the disabled elderly person desires to function.

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overhead - two psychological processes needed for independent living (5)

The ability to live independently with a disability is largely the result of two psychological processes. The first is learning skills to compensate for the deficit caused by the disability. The ability to learn and retain what is learned is of great importance to the ability to remain or return to the home. The case manager needs to understand the learning process of older persons, which frequently takes longer than in younger persons, and the division of complex tasks into simpler ones. An evaluation must be made of conditions that interfere with learning or retention and those conditions that can be improved must be identified. McCartney and Palmateer (1985) report that frequently disabled elderly who enter the caregiver's circle through the hospital and acute care settings do not screen for cognitive deficits, yet as many as 50% actually have at least mild deficits that must be considered in the development of the care plan.

The second major psychological impact a late-life onset disability has is on life satisfaction. The sources of life satisfaction frequently are changed as a result of a disability. When a disability is present with the elderly, it may be in addition to other painful losses such as the death of a spouse or limited ability to attend social functions in the community. The search for alternate methods of maintaining life satisfaction must avoid equating self-worth with loss of functioning. Psychological problems, of which the most common are depression, anxiety, somatization, substance abuse, and psychosis, frequently occur at this point. Depression is particularly a problem as it affects the very attributes needed for independent living: endurance, learning ability, optimism, good decision-making, and the motivation to improve.

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overhead - four psychological variables ----

Kemp (1990) lists four psychological variables which are strong predictors of possible failure of the consumer to live independently. All are important and can be quantified using various assessment techniques. The factors are **motivation, cognitive ability, depression, and personality traits**. Other quantifiable psychological variables include assertiveness, close supportive relationships, and the ability to focus on goals.

For elderly persons who are disabled, it is crucial to address and evaluate their multiplicity of problems. While there are consumers seeking help for particular problems, there are also consumers for whom the presenting problem is more amorphous or for whom the presenting problem provides a distorted or partial picture. Assessment of this specific population needs to incorporate traditional areas (such as intellectual and cognitive functions, personality, and affective disorders) with nontraditional areas (such as general competencies and social, familial, physical, and nutritional considerations) and other factors relevant to the presenting conditions. Assessment of the older adult should be as varied as possible: from multiple sources, in multiple ways, and about multiple areas.

The ultimate purpose of assessment in service-giving contexts is to assist professionals in their efforts to work with older people. The multiple pathways of assessment all have the goal of confirming a problem in carrying out an activity of daily living and helping match the intervention to the needs and capabilities of the older consumer and their family. If a consumer can not perform a task and yet a family member proves reliable with that same task, a problem does not exist for the case manager. The case manager, as established in Module 1, is searching for gaps in service. The major problem with independent living efforts, following hospital discharge performed without a formalized assessment, is that the case manager views the consumer from a perspective determined by his or her own background and professional experience.

The Value of Elderly Assessment

Case management and assessment can be viewed from several perspectives. In work with the elderly there is widespread recognition that older people have multiple and

complex problems that cut across the usual disciplinary and service system boundaries. Presumably, all persons are best described in biopsychosocial terms (as shown in the previous transparency) and could benefit from collaboration among the professionals they utilize. The elderly seem to have medical, psychological, and social problems at the same time in the same person more frequently than do younger adults. The case manager focusing on the elderly client's needs is often confronted with a mix of medical, psychological, and social problems that, in varying degrees, impact functioning.

Signs and symptoms of both physical and psychological disorders change with age, and distinctions between conditions such as real memory loss and complaints of memory loss or between disease-induced tiredness and the energy drain of depression become essential. The case manager will be confronted with elderly consumers who have other needs such as income supplements, home health care, legal advice, better nutrition, or improved social activities. Case managers are frequently therapists; they are working in an area between medicine, social work, and behavior. The elderly do have psychological problems, including depression, anxiety, phobias, paranoia, psychosis, and disturbed family relationships.

Functional status is not synonymous with the degree of physical impairment. A functional focus requires an awareness of the client's assets and liabilities and an understanding of the impact of these non-medical factors on the client's disability. Functional assessment can also involve observing and testing using standard scales or instruments in addition to interviewing the elderly client.

Psychological assessment is usually undertaken to aid in diagnosis and to provide information that can be helpful for the consumer's care plan. Frequently the psychological assessment will serve in both a diagnostic and consumer care capacity. Few disorders are static; rather, the consumer may enjoy improvement or display deterioration. Through repeated psychological testing a great deal of information can be gained about the rate at which change is occurring, its regularity, and whether changes that are occurring fit the expected pattern. Repeated assessment grants the consumer's family the opportunity to plan and to evaluate the efficacy of current services. The most common use of psychological assessment today is providing information about consumers' mental condition and how it relates to their capacity for independent living, self-care, psychosocial adjustment, and learning capacity.

Psychological assessment provides much of the knowledge base of the study of how aging affects mental abilities. Age-related psychological changes include those in sensory and psychomotor processes, mental ability, perception, drives, and emotions. In documenting the normal age changes that occur in mental functioning, psychological studies show the importance of using age-graded norms in the mental examination of older persons. Only by comparing an aging person's performance on mental tests with those of other people in the same age range can a valid estimate be made of the consumer's mental capacity.

Psychological research shows that different brain disorders result in dissimilar patterns of cognitive dysfunction. Documentation of a specific pattern of mental dysfunction in which there is marked impairment of the ability to perform complex and organized visumotor acts while many verbal skills remain intact, illustrates how the data of psychological assessment can provide information about some early changes in the multiple diseases categorized as dementia. Psychological assessment is also helpful in evaluating stages of brain diseases.

Two distinct methods of doing psychological assessment and the handling of the resultant data have evolved. The "clinical approach" is based on history and observations. The characteristics of the clinical approach are (1) an individualized examination in which the consumer's needs and circumstances of the examination are taken into account, (2) sensitivity to such quality features of the examination as how the subject solves the test problems, whether he or she is aware of errors and tries to correct them, and (3) a multidimensional focus on the consumer's cognitive data elicited by the formal instrument. The "psychometric approach," in contrast, is based primarily on test scores. Its basic features are (1) the use of a standardized instrument which requires that the same test be given in the same way to all clients, (2) reliance on quantitative data, and (3) a primary focus on cognitive function.

Each approach has distinct advantages and disadvantages when used with the elderly. The clinical approach is able to focus on a particular problem, such as memory, and not dwell on those functions that are basically intact. On the other hand, the clinical approach requires the use of subjective judgments frequently made in the absence of objective norms. Therefore, it is difficult to compare elderly consumers, one to another, over a period of time. The data

also can easily be misinterpreted and are vulnerable to suspicions of bias.

The psychometric approach has as its chief advantage its objectivity. The same test can be given to a consumer at different times or by various examiners and virtually the same results will be the forthcoming. The chief disadvantage of the psychometric approach stems from the restrictions imposed from standardization. For instance, should an elderly consumer take longer than the allotted time to generate a response to a memory question, he or she receives a failing score. The fact that the failure was age-related and not to a memory deficit goes unrecorded.

Perhaps more than in any other area of psychological assessment, a combined approach is needed when assessing the elderly consumer. For instance, standardized data are absolutely essential for the appropriate evaluation of mental changes in elderly persons, yet the motor and sensory declines so common to the elderly frequently require the sensitive examiner to go beyond the standardized test format if the consumer's residual ability is to be assessed thoroughly. Thus, the examiner might consider allowing the elderly consumer additional time to complete a response or use techniques that allow the elderly to compensate for attentional or memory deficits as well as other limitations. Only through an individualized examination can an elderly consumer's strengths, limitations, and particular needs be appropriately assessed.

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overhead - tripartite conceptualization of behavior

Teri and Lewinsohn (1986) employ a tripartite conceptualization of behavior in which the "cognitive" functions have to do with the process of information, the "executive" functions are responsible for the efficiency of information processing, and the "emotional" capacity is concerned with feelings and motivation. This psychological schema seems best suited to age-related changes especially related to function. Each of these three divisions can be broken down into discrete functional groupings.

The assessment of cognitive functions includes all perceptual functions, ranging from verbal and non-verbal stimuli to an assessment of each of the senses. Closely associated with perceptual functions is the capacity for

orientation (knowledge of hour, day of week, etc.). Cognitive assessment involves the domains of memory and learning. Conceptual processes are vital to elderly assessment as the results have implications related to competencies with respect to instrumental activities of daily living (IADLs). The remaining category of cognitive function involves the assessment of constructional and response functions. These areas have particular utilization when assessing elderly clients who have experienced a stroke.

The executive functions are necessary as they quantify the appropriateness of social responses and self-serving behavior. They include the ability:

- to formulate a goal,
- to plan,
- to carry out goal-directed plans,
- to ascertain an effective performance.

Executive behavior deficits tend not to surface with typical clinical examination as few tests of these functions have been devised. This category of information is generally gathered by observation.

Executional capacity is also affected by disorders of executive function. Defects in executive function are reflected in abnormal intensity of emotional response, in inappropriate emotional behavior, and in impaired ability to control affect-laden responses. Observation of the client's emotional behavior contributes to an understanding of the client's general psychological status.

In the interpretation of the data from psychological examination and then application to the care and treatment of the elderly, there are three major sources of misinterpretation of clinical assessment, and if any one is neglected, serious error can result. First, test scores must be evaluated in relation to age norms, particularly when involving motor speed, problem-solving, and memory. Second, the examiner must be alert to evidence of depression. Significant depression can masquerade as a dementia or the improvised responses can mask as psychological deficits. Third, the examiner must be alert to the presence of chronic disease that can have psychological ramifications, such as diabetes.

Criteria for Instrument Selection

The general position of geropsychologists is that assessment instruments used with younger adults are generally not useful with older ones. Although tests have been developed

for older persons, most are research oriented and not designed for clinical application (Kemp, 1986). Norms exist, but they are often taken in different samples or with different sampling strategies than the younger adult norms. There is also some uncertainty as to whether norms should be interpreted as age-specific or cohort-specific.

Rarely can an all-purpose instrument be produced or used. Kane and Kane (1981, pp. 248-249) offer the following comprehensive list of considerations when selecting a testing instrument.

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overhead - factors to consider----

- The instrument must yield comprehensive information about the consumer and the consumer's situation so that it forms the basis for an individualized understanding of the problem areas.
- It must assist providers in making decisions with and on behalf of a consumer by providing information about functional abilities and suggesting the etiology of the observed dysfunction and how functional loss might be remedied through community-based services.
- It must be sensitive to changes in functional status over time; in long-term care, a change in status may be more important than an actual observation at any one point in time.
- It must be keyed to thresholds with functional significance for the client's well-being or independence.
- It must provide a justifiable way of defining eligibility for services, so that services and benefits can be applied equitably.
- It must distinguish sufficiently small increments of change to permit differentiation of functioning at the lower

end of the continuum, where slight improvement or worsening might be very significant for the consumer, such as triggering an update of the care plan accompanied by a decrease or increase of services.

- It must cover both regular performance and capability. Performance is influenced by motivation and opportunity (for example, in many nursing homes, residents are not permitted to bathe themselves). But a case manager needs to determine actual capabilities, apart from environmental constraints, in order to make a plan that permits achievement of functional potential.
- It must be an acceptable procedure for the consumer, so that the assessment enhances rather than harms a positive relationship between the case manager, other providers, the consumer and/or family members.
- It must be acceptable to the providers. The purposes of the questions should be clear to them if they are to be motivated to use the instrument. To achieve this end, the instrument should be as streamlined as is consistent with the need for comprehensive data. If the user is a case manager with background in the social-service field, rather than a health specialist, then any health observations or judgments required in the assessment must be feasible for a person of that background.
- It must not rely on costly bulky equipment.
- It requires a branching procedure so that the assessment tool is appropriate for consumers whose functional status varies widely without requiring persons to respond to questions that are obviously

too difficult, too simple, or inappropriate to their functional or social limitations.

- It must produce categories of need that satisfy requirements for equity in the initiation and discontinuance of services across consumers.
- The assessment procedures need a branching approach, which permits the case manager to explore areas of particular importance for individual clients.
- The assessment package should be supplemented with a brief screening procedure to determine if there is a need for a more comprehensive full-scale assessment. The initial comprehensive assessment at intake can be streamlined, with branching for reassessments and monitoring procedures that emphasize collection of specific information at specific intervals, depending on the nature of the problem being monitored.
- Practical decision rules are needed to determine when the consumer is an appropriate informant and when reliable information on a particular domain needs to be sought elsewhere, especially for that proportion of the population at risk who are cognitively impaired.

The same authors follow with risks associated with validity and reliability.

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overhead - reliability & validity risks

Reliability risks:

- results are dependent on raters' judgment if the focus is subjective,
- is a function of intense rater training with projective techniques,

- is dependent on stimulus provided by case manager,
- requires the case manager to be alert to responses made on the basis of content, i.e., elderly tend to want to be agreeable,
- requires the case manager be aware of responses that maximize the elderly's benefit,
- must consider that social desirability is highly correlated with age,
- requires that the case manager monitor for attitudinal changes or responses that are a function of a situation,
- fluctuations resulting from environmental factors, i.e., fatigue.

Validity risks:

- constant environment difficult to maintain,
- lack of concrete definitions on topics such as independence and morale,
- is time window under consideration representative of person's competence (effect of illness or medication),
- different construct with elderly than younger adults.

Tests for the elderly must be normed for the older age range. The standard for older adults must be other older adults and not younger adults who differ in many ways. In addition, separate norms are needed so that scores can be adjusted to reflect the effects of various illnesses. The case manager needs to know whether the sample included large members of memory impaired elderly, which is likely to be the case if the assessment instrument was normed in an institutional setting. The user needs knowledge of to what degree the norms were developed from cross-sectional studies, as then the criteria will be cohort specific.

The value of the assessment must be communicated to the elderly with the connotation being an intent in assisting them achieve or a higher functional goal. Negative motivation must be considered because the elderly tend to view intervention as something leading to a loss of independence. A lack of responsiveness is often tied to a fear of outcome. Therefore, caution must be exercised, especially in drawing conclusions from an isolated segment of a larger multidimensional instrument.

Aging and Personality

Show class video, *Growing Old in a New Age, Intellect, Personality, and Mental Health.* Video is long (60 minutes). Instructor might want to preview and only use certain sections. It is not about frail elderly, yet makes excellent points on intellect, personality and mental health that accompany aging.

From the perspective of advanced age and personality, both entities should be viewed within the context of the life cycle. Personality is a set of psychological and behavioral characteristics of the human organism; and as the biology of the organism changes over time and the organism is changed by various environmental factors, so, too, does personality change. There is no evidence of dualism but, rather, a close interaction between personality and biological aging with different older persons in similar social settings adapting differently as they grow old. Because people share a similar biological and social heritage, a great many aspects of personality are shared by large groups.

Neugarten (1977) views personality not as a rigid or fixed entity, but as an ongoing system that is continuously changing in response to events both internal and external to the individual. The manner in which a person interacts with others and integrates that interaction into his or her personality is determined by the developmental tasks that the person performs. Developmental tasks occur at all ages, and it is generally agreed that late-life tasks emphasize the integration of life experiences. All of the tasks act to move the individual in the direction of optimal psychological function and personal integrity.

For the developmentalist, the changes that occur in personality are attributed to aging and generally occur in an orderly fashion or are related to significant events such as marriage, parenthood, job failure, or illness. Personality can

change as a function of life experiences when such events occur in a non-personality normative sequence. Abrupt changes in personality across the life span tend to correct themselves as the individual adapts. Many personality traits remain stable throughout one's life and contribute in varying degrees to success in rehabilitation or maintenance of independence. Recently mental health professionals have suggested that a life-span approach potentially offers a better model for the study of personality, especially as presenting in late life. In sharp contrast with noted psychologists of an earlier period who advanced the position that personality was established in childhood and that later developments merely repeated these foundations, the life-span perspective views personality as evolving from birth to death. This model holds that changes in adult personality arise from an interaction of the biological and social environment. Kermis (1988, 1986) believes that the benefits offered by the life-span approach are:

- Each behavior is seen in its evolutionary context as part of a chain of events.
- A natural connection exists between the life-span approach and prevention.
- The model builds on existing models and established concepts.

Researchers from differing theoretical perspectives using different methodologies generally agree that, as people age, the personality becomes more rigid. In general, research on personality has had two distinct focuses: either on internal changes or external changes. The findings with respect to internal processes show consistent and significant changes with age. These changes are generally described as a movement from an active to a passive orientation in terms of mastery of the environment. In advanced years there is generally a greater preoccupation with the inner life. The degree of emotional involvement with persons and objects in the outer world seems to decrease. The readiness to attribute activity and affect to persons in the environment tends to reduce. This inward orientation lends itself to maintaining stability in self-concept.

In contrast, adaptational patterns tend to show little significant change with age. Factors such as former work status, health, financial resources, and family are more important than chronological age in influencing adaptation.

The same criteria generally contribute in varying degrees to life satisfaction or the sum total of life's positives outweighing the negatives." An important criterion contributing significantly to the continuity of adaptative patterns rests with the network of social relationships one develops and the support and responsiveness these contribute in maintaining the aging individual.

A third level of personality functioning is represented by the nature and extent of the individual's interaction with others. For the elderly who are relatively healthy and of reasonably adequate financial means, a major decrease with age is usually noticed, particularly after age 70. This decrease is generally attributed to a change in roles such as from worker to non-worker. Some of these changes are not a function of personality traits but, rather, a shrinkage or withdrawal of others in their social network. The adaptation process is generally made easier over the life span because many events are anticipated and rehearsed. The elderly person views others going through the same processes of retirement from work, changing of roles, or the loss of a spouse, and this learned awareness provides a sense of continuity to the life cycle. When events occur out of sequence or at an abnormal interval, established adaptation processes often prove inadequate.

The adaptation process is unrehearsed and can deviate from established patterns with the onset of a disability. If personality traits change with the rapid onset of external conditions, they apparently do not change in a linear fashion; instead a series of discrete periods of change is observed with a tendency to correct as the individual adapts. Regardless of age, personality is a constantly changing record of the individual's adaptation. The personality adapts to the challenges that occur at any point in the life cycle, but these challenges confront large numbers of people significantly in old age. Old age is a period of personal losses, physical disabilities, shrinking social supports, and cultural prejudices that the individual often encounters concurrently. Despite these negative factors, generally positive coping is the rule rather than the exception. (The following are examples of personality tests, this is optional for the faculty member. The administration of all instruments listed in this module and interpretation of data produced require training beyond the scope of this course.)

PROJECTIVE PERSONALITY TESTS

Thematic Apperception Test (TAT)

Senior Apperception Test (SAT)

Gerontological Apperception Test (GA)

Id, Ego, and Superego Test

Rorschach

Draw-a-Person Test

The GA and SAT are variations of the TAT. The theme or alterations involve the use of pictures that more closely relate to the stresses that the elderly have experienced. Dye (1982) believes that projective tests have very limited application because of the skills required for administration and interpretation. She further believes that these techniques and instruments offer little additional insight into the personality of the elderly. Eisdorfer (1960a, 1960b, 1963) argues that hearing impairments and intelligence have a stronger relationship to deficits in Rorschach protocols than does chronological age.

OBJECTIVE PERSONALITY TESTS

NEO Personality Inventory (neuroticism, extroversion, openness)

Minnesota Multiphasic Personality Inventory (MMPI)

Sixteen Personality Factors Test (16PF)

Heron Personality Inventory

Eysenck Personality Inventory

Objective instruments are easy to administer and to score, but some tend to be excessive in length. Dye (1982) believes that personality instruments are more successful if they are relatively short.

Aging and Intelligence

The most common use of psychological assessment today is to provide information about the consumer's mental condition and how it relates to his or her capacity for self-care, psychosocial adjustment, or rehabilitation, and to other issues concerning the client's psychological competency. For the disabled elderly, improving function means maximizing the person's ability to live in the least restrictive and most

desirable environment. According to Kemp (1990), the ability to live independently after the onset of a disability is largely the result of two psychological processes. The first is learning skills to compensate for the deficit caused by the disability. Therefore, the need to quantify the elderly disabled's ability to learn is a major rationale for intelligence measuring. His other criterion is attitude.

The roots of clinical and psychological testing of the elderly differ. Clinical assessment of mental functioning started with "bedside" experiences of the symptoms of disordered cognition and then systematized them. Thus, clinical tests tend to be more readily matched with presenting problems of the client. Gurland (1987) suggests that there has been a recent movement to make psychological tests more akin to real-life tasks that are affected by disorders of cognition.

The concept of the mental status examination implies that a range of cognitive abilities will be tested as opposed to an evaluation which focuses primarily on a single skill such as memory or language. Consequently, these instruments should exhibit diverse items which test a variety of cognitive domains. Botwinick, (1977) suggest that level of consciousness, appearance, emotional status, language, attention, memory, abstract reasoning, and constructional abilities should be assessed as part of the basic mental status examination.

Currently, most psychologists rely on both clinical and psychometric methods in their assessment of intelligence and level of intellectual functioning. Standardized tests provide the needed objectivity and allow the examiner to compare a consumer's response with other subjects of the same age or with prior test scores obtained by the client. Standardized data are essential for the appropriate evaluation of mental changes in the elderly person.

Perhaps more than in any other area of assessment, a combined approach is needed when the motor and sensory handicaps so common to the elderly require the sensitive examiner to go beyond the standardized format and allow the client to compensate for attentional or memory deficits. The integrated interpretation that is generated takes into account the client's history and unique circumstances as well as feelings and attitudes.

Clinically, psychologists are asked to evaluate the general mental status of consumers who are quite ill and cannot tolerate lengthy evaluations. Although the major

problem is that clinical judgments are subjective, yet as such mental status examinations serve as an abbreviated battery approach which gives information on general levels of functioning along with cognitive strengths and weaknesses.

It is generally agreed that intelligence has two components, fluid and crystallized, and that there are variations in the rate of change with age. Fluid intelligence is probably biologically based and is associated with the efficiency of the central nervous system. Fry (1986) suggests that fluid intelligence may decline, perhaps reflecting decreased efficiency of the central nervous system. By contrast, crystallized intelligence, which depends on the interaction of the person with the environment, is maintained in old age. Crystallized intelligence refers to the intellectual skills acquired by means of either formal or informal education. Crystallized intelligence enables people to assimilate new knowledge.

The distinction between learning and memory is vague because the demonstration of learning involves the retrieval of data from the brain's memory bank. The assessment process must evaluate memory in detail, as memory dysfunction occurs in almost all of the cognitive disorders common in the elderly. The assessment of memory is complicated by the fact that memory capacity changes with age. Age-related memory deficiencies are more pronounced with short-term recall as a function of poor sorting strategies. The character of long-term memory seems much stronger; however, practical and significant memories are rehearsed as a function of educational levels. The time required for memory screening, whether for short term or remote, is longer.

The most widely used intelligence test for adults is the Wechsler Adult Intelligence Scale (WAIS). This test consists of 11 subtests, six of which are verbal and five performance measures. In general, the WAIS subtests show two different patterns with age. The tests that show little change across time are information, comprehension, vocabulary, object assembly, and picture completion. The subtests that generally show declines are picture arrangement, arithmetic, block design, digit span, similarities, and digit/symbol substitutions. This results in older people having higher verbal than performance scores.

Although intelligence tests tend to measure achievement in terms of skills currently being emphasized by an educational system and not skills needed in an earlier

period, they also vary depending on the sampling techniques utilized. Cross-sectional studies of intelligence using the WAIS indicate a peak in capacity in the late teens followed by a decline that increases significantly after age 70. When such measures are applied, older participants generally score lower than their younger counterparts. Longitudinal studies, or the comparison of an individual to his or her earlier performance, show less declines with age, with the declines coming much later in life. Both techniques have built-in biases as cross-sectional studies could be sampling for information and skills that were not relevant to the elderly. The longitudinal technique, on the other hand, is subject to selective dropout.

There is little or no evidence of any major general decline in mental ability with age, and there is tremendous individual variability among older people. Some elderly show sharp declines, others improve, and most show considerable stability. Even when intellectual declines do appear, they generally do not affect the ability of the vast majority of older people to function in their everyday lives.

Older consumers may fail in training programs or in learning new skills, but generally because of a lack of motivation rather than because they cannot learn. Older people learn best when the pace is not too fast and the material or tasks are meaningful to them. They can benefit from being taught "how to learn" through strategies for organizing and mediating information.

Not only are physical and mental problems likely to be confounded in the elderly, but mental problems are confounded with each other. Cognitive and affective impairments are particularly hard to distinguish. They may occur separately, but they may also coexist in the same individual. Cognitive degeneration is frequently linked with organic disorders; therefore, this unit presents instruments used in standardized psychological assessment of intelligence, clinical mental status examinations, clinical assessment of organic disorders, assessment of memory loss, and clinical assessment of affective disorders. (The following lists of instruments is optional discussion for the faculty member).

INTELLIGENCE TESTS

Wechsler Adult Intelligence Scale

Full Range Picture Vocabulary Test

Draw-A-Person Test

Kent EGY

Primary Mental Abilities Test

Progressive Matrices Test

Mill Hill Vocabulary Test

MENTAL STATUS TESTS

Mental Status Questionnaire

Mini-Mental Status Questionnaire

Short Portable Mental Status Questionnaire

Face-Hand Test

Viro Orientation Scale

Set Test

FROMAJE

Wechsler Memory Scale

Visual Counting Test

AFFECTIVE FUNCTIONING TESTS

Zung Self-Rating Depression Scale

Beck Depression Index

Hopkins Symptom Checklist

Affect Balance Scale

Geriatric Depression Scale

Hamilton Depression Scale

ORGANIC DISORDERS SCALES

Set Test

Bender Gestalt

Wechsler Memory Test

Halstead Reitan Battery

Blessed Dementia Scale

Functional Dementia Scale

Functional Rating Scale for the Symptoms of Dementia

Global Deterioration Scale

Functional Assessment Staging of Alzheimer's Disease

Clinical Dementia Rating Scale

Cambridge Mental Disorders of the Elderly Examination (CAMDEX)

Sociometric Assessment

Sociometric measures focus on social behavior, with the usual focus being on patterns of belonging within a group. With the elderly, the focus is on social adjustment due to losses, social interaction, and reserves. One of the goals of case management with the elderly is to improve sociometric status within an elderly context. Weiss (1969) believes that across the life-span a "fund of sociability" is established. This social fund or multiple sources serve in the later years to cushion the individual against specific losses.

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overhead - common problems in measuring social functioning (12)

Adequate social functioning in an elderly context is difficult to define, in part because of varying levels of competencies. Following are some of the common problems experienced in measuring social functioning of the elderly.

- The roles of family members deviate greatly in different subgroups; therefore, checklists do not translate well from one culture to another. It is easier to gain insight into global issues rather than specific ones.
- Work relationships determine social activity. Role expectations are not well defined in retirement, especially where the wife's social expectations have been associated with a husband's occupation and he is now retired or she is a widow.
- Relationships between spouses or their children are often dictated by custom.
- It is difficult for the observer to be fully aware of appropriate thresholds at both ends of the social spectrum, from isolation to excesses.

- The observer must be aware of changes, especially in the direction of diminished social contact.
- Who supplies information: divergent generations view social functioning differently.
- Self-reports have limits:
  - A tendency to defend family members even if they are wrong.
  - Memory losses contribute to individual underestimating or overestimating frequency of significant events.
  - A tendency to give socially desirable responses.
  - The frequent use of poorly defined terms that require interpretation, e.g., friend.
  - Was the choice of "time window" typical of overall social interaction?
  - Difficult to quantify all responses and assign proper weights.
  - Often social support networks are hypothetical; the observer must determine whether self-reported resources are valid under conditions of stress. Have the resources been tested and under what conditions?
  - It is difficult to gather information from the cognitively impaired (observers must be aware of emotional reactions and responses that their own behavior might evoke).
  - It is difficult to quantify small increments of social functioning, such as the work of institutional volunteers or a telephone call from a friend.

Kane (1981) stipulates the existence of three major components from which to assess social functioning:

- social interaction and family resources.
- personal coping and subjective well-being.
- person-environmental fit.

Social interaction takes into consideration events that challenge the social network such as retirement, bereavement, and diminished reserves. Coping refers to adaptive abilities and the subjective state that follows. Person-environmental fit (rather than environmental status) examines a period of increasing constraints because of a decline in physical and mental competencies as the challenge from the environment becomes greater. Adaptation becomes the major option.

SOCIOMETRIC INSTRUMENTS

I. Social Interaction and Family Resources

A. Social Interaction

Social Networks Assessment Questionnaire

Network Analysis Profile

OARS: Social Resource Scale

Social Behavior Assessment Schedule (SBAS)

Bennett Adult Isolation Scales

B. Family/Intergenerational Support

Role Activities Scale

Mutual Support Index

Family Structure and Contact Battery

Exchanges Between the Generation Index

Family Structure and

Contact Battery

Exchange of Support and Assistance Index

Family APGAR

HRCA Social Interaction Inventory

II. Measures of Subjective Well-Being and Coping

Cavan Attitude Inventory

Kutner Morale Scale

Life Satisfaction Index

Philadelphia Geriatric Center Morale Scale

Geriatric Scale of Recent Life Events

Contentment Index

Coping with Stress

Oberleder Attitude Scale (Oberleder, 1961)

Mode of Adaption Patterns Scale (Sharma, 1977)

Tri-Scales (Schowfield, 1973)

III. Person-Environmental Fit

Indirect Assessment of Social Interaction

Territorial Behavior Report Scale

Person-Environment Fit Scale

Ward Atmosphere Scale

Satisfaction with Living Environment Questionnaire

Fear in Environment

Locus of Desired Control

Satisfaction with Nursing Home Scale

Community-Oriented Programs Environment Scale

Environmental Response Inventory

Observation-Interview

A comprehensive and systematic assessment is the first goal of the case manager who works with older consumers. Various factors influence the assessment process such as the emotional and physical condition of the elderly consumer, the consumer's desire to cooperate with and tolerate the assessment process, and the degree of social support. A systematic approach to comprehensive assessment includes information obtained through observations and interviews. Basically there are two modes of observation: we can watch people do and say things, and we can ask people about their own actions.

The key to accurate assessment in older people is to carefully consider the person's behavior in the context of his or her past history, cultural background, and current environmental situation. The subjective viewpoint is critical in obtaining information on factors affecting motivation of the elderly consumer desiring to remain in their home. Fishman (1962) describes motivation as the single most important ingredient necessary for independent living. Improvement in task accomplishment, according to Rosillo and Fagel (1970), generally correlates well with the consumer's own appraisal. This points out the importance of taking the subjective viewpoint as equally critical as the staff's appraisal in understanding motivation. The subjective viewpoint attempts to synthesize information on each of the variables of motivation, including the consumer's wants, the consumer's beliefs, knowledge of the consumer's reward system, and the costs involved in the restoration process. The case manager should listen for words that reflect faulty beliefs, expectations, or assumptions. The case manager needs to monitor for rewards that sustain desired behavior and be aware of how to reduce undesired costs.

Case managers need to blend controlled with uncontrolled observations so as to obtain reliable information from which they can draw valid inferences. The use of only con-

trolled observations fall victim to the criticism of being too narrow and artificial. Kerlinger (1986) believes that observations must be naturalistic and immersed in ongoing realistic and natural situations.

Although virtually all mental health professionals agree that older consumers' current ability to function in the varied dimensions of their lives need to be assessed, many clinicians choose to use an unstructured consumer interview combined with reports from reliable information. Others choose a structured questionnaire such as the Older Americans Resource and Services (OARS) instrument (Duke University, 1978). The clinician using such an instrument must monitor for conditions such as the elderly client being overanxious, paranoid, physically weak, or unable to answer the questions for whatever reason (Gurland, 1973).

Kermis (1986) believes that the establishment of good rapport with the elderly consumer is essential in creating an interviewing environment that is as stress-free as possible. Good rapport increases the probability that the required information will be obtained from the consumer. In order for the person being interviewed to be open with the interviewer, the older consumer must feel that the interviewer accepts him or her as a person and is not frightened or disgusted by the physical or mental changes that take place in old age. The consumer must believe that the interviewer has knowledge of the psychological problems of old age and that the practitioner has the professional skills necessary to work with the older person, regardless of personality differences or cultural variations.

It is important for the case manager to understand that the setting and time of evaluation also can influence its success. It is generally agreed that older consumers offer a superior interview at midday because of fatigue factors frequently experienced in the early morning or late afternoon (Gurland, 1980). It is important that the consumer be relaxed. Kermis (1986) states that the case manager must contribute the appropriate amount of structure to the interview so as to maintain topic focus in a relaxed atmosphere. The interviewer must therefore learn to interrupt and ask questions that provide the needed focus. The interviewer should make use of simple and concise language that will assist the consumer in understanding the meaning of questions. The therapist must also manifest patience when the elderly client has difficulty in producing words or expressions and exercise caution in confusing this with rambling.

Empathy is a key aspect of the interview with an aged consumer. The interviewer must make use of communication techniques that reduce the strangeness that older persons frequently feel in the interview situation by giving them a familiar base from which to explore other important areas. "Reminiscence" can be an important method to facilitate further communication by making use of suggestions that assist the elderly consumer in reflecting on the past. It is important with this technique not to hurry, particularly with noncommunicative or mildly demented older persons.

Other factors that the interviewer should consider include the degree of sensory deprivations that impede responses, cohort or generational preferences such as the use of Mr. or Mrs., and physical position such as being on the same plane with the consumer. A handshake is a positive use of appropriate body language along with eye contact and appropriate use of touch to create a better interviewing environment.

Functional Assessment

Case managers working with community-based programs share a common commitment to independent living, particularly for those with marginal skills. The philosophical base of case managers with respect to the concept is most compatible with the needs of the elderly still residing in the community. Functional assessment represents a comprehensive evaluation of the basic skills needed for independent living. A systematic approach to the assessment of functional ability can add quality to life through a determination of resources needed for the elderly to live in the least restrictive environment where personal options are maximized. Once independence is lost, the length of life varies within considerably tighter bounds, hence the emphasis on the maintenance of existing function.

The purpose of most clinical assessment is to gain maximum knowledge of a person's assets and liabilities in as objective a fashion as possible with the least expenditure of time and professional resources. The traditional psychological test battery fits this purpose, as does the medical and mental examination, the nursing care assessment, the intake interview, and other approaches. Functional assessment is similar to these approaches, yet there are important differences. Functional assessment is broader, more eclectic, and less profession-specific than other forms of assessment. Functional assessment represents an attempt to evaluate the most important aspects of the behavior as well as the objec-

tive and subjective worlds of the person through standardized methods that can be applied by practitioners with a wide variety of backgrounds.

Functional assessment is above all valuative, with an implied assess-versus-liability, positive-versus-negative judgment made about every attribute being assessed. This valuative stance is not always present in clinical assessment. Describing the quality of personal relationships or the unique pattern of personal needs in a psychiatric examination does not necessarily require that one way of relating to others or of experiencing oneself is judged superior to another.

Functional assessment is unique because most professions have their favorite domains on which assessment is concentrated. For example, psychometrists focus on cognition and nurses on activities of daily living. Functional assessment, by contrast, has the aim of evaluating every important realm of life. Some of the domains of everyday functioning that have not usually been included in clinical assessment batteries, such as amount of social contact or environmental quality, are defined in the realm of functional assessment.

Functional assessment is again different as it is necessarily cross-disciplinary and usually capable of being performed by people with specific assessment training but not necessarily full professional training. This last fact has to some extent lessened the appeal of functional assessment for the highly professionalized who view the process as being accomplished only by a select few with nearly secretive skills. The fact remains, however, that there is more to life than any profession-specific approach elicits.

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overhead - reuse "assessment should include" which is #4 in this series

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Lawton (1983, 1986) believes that functional assessment should evaluate qualities in four major sections: behavioral competence, psychological well-being, perceived quality of life, and objective environment. Behavioral competence is the evaluated quality of behavior in domains that by normative social judgment have been considered necessary for adaptation to the external world (physical health, functional health, cognition, time use, and social interaction). Psychological well-being represents the person's subjective judgment of the total, generalized quality of self in

its own terms and in relation to the external world, including the affective states associated with cognitive processes (ego strength, self-esteem, or positive mental health). Perceived quality of life is the person's subjective judgment of the quality of his or her experience in any of several limited areas of interaction with the external world (degree of satisfaction with quality of marriage, family life, friends, work, housing, income, and standard of living). The objective environment is the physically measured or consensually judged quality of all that lies outside the person (physical environment, or natural or person-made environment exclusive of people; personal environment, which includes the people who are significant whether in a one-to-one relationship or in small groups; and social environment, which includes institutionalized influences that affect the person).

Functional health is biological health expressed in action through everyday activities since general health measures have limited value in indicating degree of independence. The capacity to function in the home independently or with some assistance is poorly described by a constellation of chronic medical conditions alone. The usual catalogue of physical problems is grossly insufficient to assess the elderly's functional capability. Likewise, a consumer's mental status alone does not always lend itself to the criteria necessary for independent living.

There are several methods of assessing functional performance: structured interview, self-administered questionnaire, professional judgment, and direct observation using standardized procedures and instruments. Direct observation is the preferred method, but it does have extra time demands as well requiring either that the elderly client be transported to the testing site or that the props be transported to the consumer's home. Professional judgments are subjective and have the possibility of introducing error. Self-report of function through structured interviews is easy, fast, and inexpensive. Structured interviews must be highly standardized to produce reliable information. Nelson et al. (1983) found self-reporting techniques by the elderly to be generally accurate, with clients tending to rate their function at a slightly lower level than the physician, the major variation being lack of total knowledge of the client on the part of the physician.

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show video, ***Resident Assessment: Physical Functioning.*** This video is optional. While in the opinion of the authors, it is very

well done, the content applies totally to an institutional setting. This needs to be explained to class participants by saying that virtually all of the AV materials to date address institutional concerns, as community-based programs are new. Hopefully, AV material will be forthcoming that addressed real-life situations in that realm.

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overhead - Activities of Daily Living (ADLs & IADLs)

The fundamental tasks and demands of daily living and the items comprising functional assessment are divided into activities of daily living (ADLs) and instrumental activities of daily living (IADLs). ADLs are the functions that are fundamental to independent living. The Katz Index (1962) of ADLs includes the following: bathing, dressing, toileting, transferring from bed or chair, continence, and feeding. IADLS (Lawton & Brody, 1969) include more complex activities such as preparing meals, managing money, and using the telephone.

Although the list of possible instruments is long, we begin the addition to the Katz and Lawton instruments with widely accepted comprehensive instruments, including the Older Americans Research and Service Center Instrument (OARS). Developed at Duke University, this well-tested instrument is designed for assessing functional status of the community-dwelling elderly in five domains: social resources, economic resources, mental health, physical health, and ADLs. The 105 questions can be administered in about an hour and generate information on services received by the elderly individual. Other multidimensional functional assessment instruments are the Sickness Impact Profile (SIP), the Comprehensive Assessment and Referral Evaluation (CARE), and the Patient Appraisal and Care Evaluation (PACE).

Another well-established instrument for measuring functional status is the Barthel Index (Mahoney & Barthel, 1965). This index provides a score based on ratings much like the Katz ADL Index. It elicits information on the degree of assistance needed with each activity or the ability to perform an activity without a personal care attendant. In rehabilitation settings, the Barthel Index correlates well with clinical judgment and has been shown to predict both mortality and the ability to be discharged to a less restrictive living environment.

Frequently, functional assessment instruments are used in conjunction with mental status questionnaires such as the Dementia Rating Scale, the Functional Assessment Scale, the Global Deterioration Scale, the Functional Assessment Staging of Alzheimer's Disease, and the Dementia Rating Scale.

The use of instruments and standard procedures to assess the functional status of the elderly is an area that will increase in importance in the 1990s. Functional assessment is critical because the elderly's ability to remain independent may hinge on their ability to perform activities of daily living. This focus on functional needs puts the emphasis on what is important to the person and how the person can maximize functioning at home and in the community. A systematic approach to functional assessment is helpful because it provides a task-specific framework to evaluate whether the person can perform the tasks that are required to live independently. Functional assessment is a major component in quantifying the spectrum of difficulties encountered by the elderly and a necessary first step in organizing them into solutions.

The ultimate purpose in assessment in a service-giving context is to assist professionals in their efforts to work with older people. There are a number of direct and indirect ways in which this can occur, with the multiple pathways to intervention all having the goal of identifying a problem and helping match the intervention to the needs and capabilities of the older client. A related favorable result of formalized functional assessment is that attention is directed toward a holistic view of the person rather than a limited view frequently associated with specific professions. Functional assessment can play an important role with families in assisting them to better understand their elderly family member, maximize the use of resources, and relieve feelings of guilt as a result of irrational expectations.

Public Sector Assessment in Texas

Participants receive handout of instruments used in Texas. An appropriate activity is suggested whereas participants familiarize themselves with instruments by assessing each other, or shadowing a practicing case manager.

A dual set of forms has evolved in Texas. Initially, the Texas Department on Aging (TDoA) developed a 10 page form

instrument known as Form 102. An observation of this form reveals that it begins by seeking basic demographic information. Section *A* beginning on page two gathers medical history information including current conditions, treatments and medications. Page three of that section examines a very important component which focuses on nutritional practices. Section *B* beginning at the bottom of page three examines cognitive/emotional functioning.

Section *C* on page four is a quantification of Activities of Daily Living. The case manager is asked to rank each of the seven categories by circling the selected rating of zero (0) to three (3). Item five has two parts which address both continence of bladder and bowel, and thus each is rated giving a total of eight categories. Those categories are then totaled and that number recorded at the bottom of the page. At the top of page four, the case manager sums the number of times he/she has circled either a functional level of two or three (from the left hand column) and sums the circles to give a total of functional impairments. At the bottom of the page the rater is asked to assign a similar rating to the level of help the consumer is currently receiving with ADLs.

Page five begins Section D which examines the consumers level of functioning with respect to Instrumental Activities of Daily Living (IADLs). Items here are rated from zero (0) to two (2). This number then is recorded at the bottom of the page. The scoring is done in a similar manner as page four with the exception of the upper right-hand corner where the totals that are counted are those either marked with a number one or two. As with ADLs, the rater evaluates the level of assistance the consumer is currently receiving with IADLs and that number is placed in the appropriate space at the top of page six at the close of Section D.

At the middle of page six, the scores from the sums of ADLs and IADLs are added together. This gives the case manager an opportunity to examine the functional range as listed as well as the level of impairment.

Section E begins on page seven and seeks information with respect to informal supports. This information is most valuable as the case manager has to make a determination from this as to where the gaps are in service. Adequate informal supports can supplement functional losses and thus fewer gaps for the case manager to fill. Sections F, G, and H seek additional information for the case manager in an effort to have a comprehensive picture of the consumer. Section I

on page nine asks for financial information. This assists the case manager in determining what benefits the consumer might be eligible to receive. It was emphasized in Module I that it is better to try to obtain the financial information during the intake process so the potential consumer can be directed to TDHS at that interval. Page nine ends with an examination of the services currently being received and asks for the services needed to sustain the consumer in their home.

The Texas Department of Human Services (TDHS) utilizes their Form 2060. This has relevance for all case managers as it represents a basic summation of the information that comes from Form 102. At the mid-point of 1994, TDoA entered an arrangement with TDHS know as presumptive eligibility. The *Pre-Admission Screening Presumptive Eligibility* (PASPE) program is a program of TDHS that cooperates with AAA case managers. While TDHS is the funding agency for this package of in-home services, AAA case managers have the authority to determine eligibility with services starting immediately. The presumptive eligibility is in conjunction with the Primary Home Care program which is one component of the larger luster known as Community Care for Aged and Disabled. Primary Home care offers assistance with personal care and housekeeping tasks for persons with medically related personal care needs. TDoA case managers and their contractors use Form 2060 when working with the PASPE program of Primary Home Care.

An examination of Form 2060 displays to the user how to rate the impairments in the first column to the right. Please note that the initial six items address ADLs followed by 18 items that address IADLs. The area to the right of each row is typically not used by the case manager doing the assessment. It is where the funding agency attempts to assign the amount of time needed to assist the consumer with each task where they are functionally impaired. This time then is totaled and that gives the funding agency a time in hours that it will pay for assistance with a specific consumer. Various contractors have modified this form, yet allow the scoring to remain the same as the original.

TOPIC

B. **AGE RELATED CHANGES**

OBJECTIVES

AT THE COMPLETION OF THIS SESSION, THE PARTICIPANT WILL GAIN A BASIC UNDERSTANDING OF:

1. The psychosocial aspects of disability.
2. The consequence of bed rest.
3. Aging and the integumentary system.
4. Aging and the nervous system.
5. Aging and the musculoskeletal system.
6. Aging and the cardiovascular system.
7. Aging and the respiratory system.
8. Aging and the endocrine system.
9. Aging and the urinary system.
10. Aging and sensory changes.
11. Aging and the kinesthetic and vestibular senses.
12. Understand aging and mental health conditions.

Psychosocial Aspects of Disability

The extent of interaction between biological, psychological, and social factors increases with age. Psychosocial factors are some of the most limiting causes of handicap among elderly disabled persons because of the greater interdependence between and among these spheres. Any aspect of an older person's functioning is a product of these three factors, and a comprehensive approach to independent living is more important for the elderly than any other age group. This training material emphasizes the notion that the majority of consumers needing case management do so following hospitalization. Hospitalization is frequently the result of the onset of a disabling conditon and this point is made throughout this material.

A disabling condition for the elderly frequently involves a chronic disease which cannot be cured. The success of any intervention cannot be measured in terms of physical recovery. The case manager must view the consumer's life as permanently changed; hence, efforts should focus on adaptation. Blazer and Williams (1980) maintain that the onset

of a disability for the elderly causes a stress level as high as the death of a spouse.

The adaptation process is complicated by the fact that the learning process is slower and there is usually little in the background of the disabled elderly for them to draw from with respect to coping with a problem of this magnitude. The elderly are also vulnerable to the stresses produced by a disability, which include (a) attempting to deal with intense personal feelings about the disability, (b) attempting to preserve self-esteem, and (c) trying to incorporate these new changes into a lifestyle that is established. For many of the elderly, the onset of a disability marks the first time they see themselves as "old." This view of oneself compounds the problem brought on by the disability or chronic condition.

The case manager must assist in the development of goals that are appropriate and attainable because this is directly related to the success of the independent living effort. For older disabled persons, goal-setting is often more difficult. The goal-setting process should include a determination on behalf of each consumer as to what brings pleasure so that the incorporation of needed adaptive techniques can be incorporated in pleasurable experiences that will counterbalance or outweight life's pains.

The following is a brief look at the major body systems accompanied with an overview of normal age-related changes and changes that are sources of concerns for case managers. In appropriate categories suggestions are advanced to promote healthy aging and independent living.

Consequence of Bed Rest

One of the human being's most unique attributes is vertical posture during stance and gait. When upright posture and gait cannot be maintained, such as being in a hospital bed, multiple physiologic changes occur. These changes are referred to as deconditioning and occur to varying degrees in multiple organ systems such as the cardiovascular, musculoskeletal, and nervous systems. Deconditioning is the multiple changes in organ system physiology induced by inactivity and reversed by activity. The degree of individual change depends on prior fitness level and the degree of superimposed inactivity.

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overhead - changes as a result of bed rest

The effects of bed rest are similar to sensory deprivation. Intellectual performance declines, verbal fluency diminishes, and an accompanying loss in the ability to discriminate between colors occurs. The perception of time intervals can become distorted, and often the elderly experience hallucinatory-like experiences from prolonged bed rest. Sleep patterns frequently change drastically, as well as more pronounced skin temperature changes in the elderly over the young. Balance mechanisms lose effectiveness, contributing to postural sway. Prolonged bed rest is also associated with prolonged reaction times.

The worst fundamental change with bed rest is alterations to the cardiovascular functions. The deconditioned elderly individual faced with even light tasks will experience a marked increase in vital signs. The return of blood pressure and pulse to resting values or the recovery rate with the deconditioned elderly is much slower. By the end of the first week of bed rest, the elderly experience an increase in resting heart rate and, by three weeks, the increase can be very significant. For the elderly, a longer period involving activity is required before the resting heart rate returns to normal. This increase in rate is also accompanied by a decrease in blood volume circulated. With the deconditioned elderly individual, the decreased volume has a corresponding decrease in oxygen uptake.

Prolonged bed rest has little effect on pulmonary function but a profound impact on the musculoskeletal system. The amount of strength lost during bed rest is unclear because, on the average, the elderly lose 33% of their strength due to inactivity that is considered normal aging. Training programs are generally effective in restoring strength.

The major metabolic changes with respect to bed rest involve the increased excretion of calcium. These losses for the elderly begin on the second day of bed rest and progressively increase to a peak during the fourth to fifth week. Accelerated loss of calcium has important implications with regard to the high incidence of osteoporosis in elderly women.

Sitting, in and of itself, is an exercise to the frail elderly. Adequate sitting tolerances can be obtained by increasing the frequency and duration of the sitting periods. Stretching can improve deficits in range of motion and help improve body awareness. Stretching benefits shoulder rotation, hip extension, knee extension, and ankle dorsiflexion, which are the motions most likely to be limited from prolonged bed rest.

Vital signs should be closely monitored during early ambulation following prolonged bed rest. The heart rate should not be allowed to increase over 20 above the resting rate, assuming it is normal. Ambulation to mild fatigue is generally recommended three times a day if muscles are not extremely weak. Reconditioning generally takes twice as long as the period of deconditioning.

Decubitus ulcers or pressure sores are frequently a result of prolonged bed rest caused by an impairment of blood supply and inadequate nutrition of tissue subjected to prolonged pressure over bony protuberances. Skin breakdown results from prolonged pressure on bony areas of the body, such as the hips, ankles and heels. The ulcers develop rather quickly for bedridden or inactive persons. Prevention is extremely important through basic procedures because these ulcers are prone to infection and healing is slow.

Aging and the Integumentary System

The integumentary system encompasses the skin, hair, nails, and various sweat and oil glands located in the skin. The most immediate and telltale signs of aging are reflected in changes in the skin. Not often identified as a body system, the skin and its appendages are one of the largest and most complicated of the body systems. The skin surface of the average adult covers over 3,000 square inches, weighs about six pounds, is served by one-third of all the blood circulating in the body, and contains many nerves and sensory receptors (Ferrell & Osterwell, 1989).

Most of the changes that occur in the skin do not constitute a threat to one's life, nor do they greatly affect a person's health. Age-related changes of the skin, however, should not be overlooked by those caring for older persons. Representatives of regulatory agencies that monitor the institutionalized elderly view the individual's skin condition as being reflective of the quality of many of the components of the services provided.

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overhead - age changes - skin - epidermal

AGE-RELATED CHANGES

Epidermal changes:

- The epidermis becomes thinner with age due in part to a decreased rate of cellular division. Fine wrinkles become more pronounced.

- A less flexible outer layer (stratum corneum) leaves the skin prone to cracking and fissuring.
- Absorption rates or the skin's permeability varies more in the elderly as a function of skin temperature and thickness per exact location.
- There is a decrease in the cells capable of producing the brownish-black pigment melanin.
- Pigment cells (melanocytes) group together, forming dark pigment plaques called "aging spots."

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overhead - skin changes - dermal

Dermal changes:

- There are alterations in the connective tissue due to a reduction in fibroblasts and fibers.
- Collagenous fibers become larger, reducing the amount of storage space for fat, water, and matrix content of the dermis.
- There is a decrease in the density of the capillary network, resulting in the skin's surface becoming cooler with a corresponding reduction in growth of nails.
- Capillaries become more fragile, leaving the elderly susceptible to bruise marks.
- There is an increase in deep wrinkles due to a change in the elastic fibers.
- There is a reduction in the number of sweat and sebaceous glands, resulting in drier skin and a diminished ability to regulate temperature.
- A decrease in the number of hair follicles occurs.

- A decrease in the pigment in the hair results in hair being colorless.

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overhead - changes - hypodermal- under skin

Hypodermal changes (subcutaneous tissues not part of skin):

- A general loss of fat from this connective tissue contributes to wrinkles.
- A loss of fat results in loss of padding. With a reduced blood supply, the bedridden elderly are subject to the development of pressure sores (decubitus ulcers).

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overhead - age-related dysfunctions

Age-related dysfunctions:

- Xerosis - unusually dry skin on exposed surfaces which can result in flaking and chapping.
- Pruritus - an itching related to extremely dry skin, drug reactions, or systemic medical disorders
- Lentigo - referred to as senile freckles or irregular darkened areas that form in the skin, usually on the hands, forearms, and face, resulting from increased depositing of melanin.
- Acrochordon - or cutaneous tags which are small pendulous skin growths usually found on the chest, neck, eyelids, and armpits, generally thought to be associated with hormonal imbalances.
- Senile keratosis - localized red areas that become scaly and change to a yellow-brown color. These must be carefully watched as they can be precancerous.

- Seborrheic keratosis - benign epidermal tumors that are not generally precancerous. These begin as yellowish oval-shaped plaques that thicken and become brown or black.
- Herpes zoster: a cutaneous eruption caused by the same latent virus that once brought chickenpox to the individual and now results in shingles. The painful condition is not elderly specific, yet occurs at a much higher rate with the elderly.
- Decubitus ulcers: pressure sores that result from persons being immobilized, usually occurring over bony prominences that have reduced padding because of the loss of subcutaneous fat.
- Bullous pemphigold - skin disease marked by blisters and an itching rash. Requires skin biopsy for diagnosis and can lead to secondary infections.
- Skin cancer - most common form is Basal Cell Carcinoma, (base/deep layer) which occurs on sun-exposed areas of fair-skinned individuals with extensive sun-damaged skin.

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overhead - suggestions - skin changes

Suggestions for accommodating age-related skin changes:

- Avoid extensive sun exposure.
- Use sunscreen when in the sun (SPF 15 or higher).
- Use good nutritional practices.
- Use good exercise.
- Pay prompt attention to skin changes.
- Attempt to maintain room humidity at above 40%.
- Use mild soaps when bathing (example: Dove soap).

- Wash with soap only once daily.
- Add bath oil to the water.
- Apply moisturizer after bathing.
- Drink adequate amounts of water.
- Choose clothing made of soft cottons or other non-abrasive materials.

Aging and the Nervous System

The nervous system, which is the most complicated body system, coordinates and integrates all body activity. The nervous system is of prime importance in any consideration of the aging process because changes in this system will affect organs in other body systems and can cause disturbances in many body functions. Unlike most body cells, nerve cells generally are considered to be post-mitotic or of a non-dividing nature.

It is difficult to generalize with respect to the significance of the aging process as it affects the nervous system because much of the research to date has emphasized pathological results rather than normal processes. Another problem is that a substantial amount of information is based on estimates of age-related changes largely derived from animal research. As with other systems, the process of human aging is highly individualized, and the behavioral implications based on these changes are not always consistent.

Aging changes in the nervous system make it one of the most feared aspects of growing old. Nerve cells denote the true age of the organism since they are present at birth and are not replaced. Aging changes in this system can slow the processing of information and affect a person's memory and ability to learn.

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overhead - changes to nerve cells

AGE-RELATED CHANGES

Nerve cell changes

- Cells are lost, particularly in frontal areas of the cerebral hemispheres. Senile plaques, composed of parts of degenerated neurons, accumulate.

- Cells of non-nervous supporting tissue of the brain and spinal cord increase with age.
- Old nerve cells change form, resulting in the nucleus of the cell and its cytoplasm (surrounding material), which once looked very different, to become similar in appearance.
- Lipofuscin or brown pigment accumulates with age and appears consistently in the nerve cells as one ages.
- The biochemical activity in brain cells is reduced.
- Blood flow is reduced, with a corresponding reduction in oxygen. Nerve cells are especially sensitive to a lack of oxygen.
- Purkinje cells in the cerebellar cortex are lost with age.
- Neurons in the putamen and locus ceruleus are reduced in number with age.

Changes in transmission efficiency:

- Reduction in the number of functional nerve cells reduces the strength of the transmitted message from sensory organs to the brain or from the brain back to the sensory organs.
- The coherence of the message is reducd as fewer nerve cells result in more space to cross and also permits the interference of background noise.
- Motion part of the cerebral cortex may continue to respond after stimulation ceases, resulting in interference with subsequent signals.

Changes in brain wave pattern:

- The brain wave patterns of older persons are slower, with EEG patterns resembling those of a child.

- Individual differences in EEG patterns increase with age.

Changes in the autonomic nervous system:

- The ability to bring about desired responses to environmental stimuli is reduced.
- Control of anal and urethral sphincters is diminished.

Changes in sleep patterns:

- The stage of deep sleep is reduced, which is thought to have a negative effect on cognitive performance.
- The time spent sleeping is reduced, resulting in frequent napping.
- Frequency of actually awakening during periods of sleep is higher.

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overhead - age-related disorders (nervous system)

AGE-RELATED DISORDERS

- Insomnia or the inability to sleep.
- Stroke or cerebrovascular accident involving neurologic damage to the brain.
- Senile tremor involving primarily the head, neck, face, and sometimes the limbs in repetitive movement as the result of the destruction of some neurons, which releases other neurons from their inhibitory functions.
- Parkinson's disease, resulting in tremor and muscular rigidity as the result of deterioration in the integrating centers of the brain. As the disease progresses, standing, walking and balance are impaired.

- Huntington's disease, a hereditary disease of the brain characterized by jerky involuntary movements and mental deterioration.
- Tardive dyskinesia, a movement disorder as a result of long-term medications such as antidepressants, antipsychotics, and antihistamines.
- Herpes zoster (shingles), caused by an inflammation of the cutaneous nerves. The painful disorder is a systemic infection caused by a virus and can lead to neuritis.
- Trigeminal neuralgia, a facial burst of agonizing pain involving the trigeminal nerve resulting in anxiety and apprehension.
- Dementia:
  - Multi-infarct dementia or mini-strokes resulting from interrupted blood flow to the brain.
  - Alzheimer's disease, the most prevalent of the dementias, which is not preventable or reversible. Post-mortem examination of the brain remains the best confirming technique to determine the progressive deterioration of brain cells. The disease moves from the early stages of moderate impairment in memory to later stages where the individual requires total care. Some 50-60% of all elderly diagnosed with dementia have Alzheimer's disease. The post-mortem examination will reveal: (a) neurofibrillary tangles--pairs of filaments wrapped around each other; (b) neuritic plaques--filamentous and granular deposits representing degeneration in the

neuronal processes; (c) granulovascular degeneration in which fluid pockets and granular material develop in the neurons. (Pajk, 1984, p. 217)

Aging and the Musculo-Skeletal System

One of the most stressful aspects of advanced age is the increasing probability of major changes in lifestyle, especially changes that suggest decreasing physical competence. The corresponding effect of physical loss is increased dependency. Independence is a strong cultural value in virtually all societies, with dependence generally viewed as undesirable. The fear of dependency is a major concern held by the majority of the elderly.

Dependency at any age and especially among the elderly often results from a decrease in physical mobility which is accompanied by an increased inability to negotiate the living environment. Inability to perform many of the tasks of independent living is frequently the result of age-related changes in the musculoskeletal system. Frequently this system is not fully appreciated until some loss of agility occurs. There is a wide diversity in the rate and amount of musculoskeletal change as one person may be incapacitated and another manifest little degeneration at the same age.

Changes in the musculoskeletal system for the person who is older are age- and/or disease-related. Variability becomes more marked by virtue of the diversity among specific muscle groups and joints, and also of the heterogeneity of the muscle fibers in an individual muscle. Many of the conditions experienced by this system need a preventive approach in the advanced years. Some of these conditions are actually reversible if proper and timely diagnosis is made.

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overhead - musculoskeletal system age-related changes

AGE-RELATED CHANGES

- Reduction in bone mass is universal while rate of loss is highly individual.
- Bone density is reduced.
- Calcium is lost from the bone; therefore, bone has decreased ability to resist compression.

- The amount of collagen fibers is reduced; therefore, bone has decreased ability to resist forms of twisting and stretching because it is more brittle.
- Gender differences are apparent.
- Frequency of poor nutritional habits is higher. If intake of vitamin D is reduced, the uptake of calcium is reduced.
- Damaged cartilage heals more slowly with advanced age.
- Muscle is lost with the decrease in muscle weight relative to total body weight. Skeletal muscle will reflect a loss of strength (up to 50% after age 70) which is directly related to decreased physical activity. Decreased muscular strength, endurance, and bulk are associated with decreased number of muscle fibers. Smooth muscle has a tendency in advanced years to form saclike pouches called diverticula. Cardiac muscle generally becomes thinner after age 50. Fat, which accumulates in the cardiac muscle fibers, tends to be replaced with collagenous and elastic connective tissue.
- Muscle elasticity is reduced; therefore muscle has less flexibility.
- Space between vertebrae decreases as discs become compressed.
- Ability to absorb calcium from the bowel is reduced.
- Joint lubrication is reduced because of less synovium.

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overhead - age-related dysfunctions of musculoskeletal system

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AGE-RELATED DYSFUNCTIONS

- Arthritis-
  - Osteoarthritis-- most common form affecting some 40 million people (Spence, 1989). Also known as degenerative joint disease.
  - Rheumatoid arthritis-- most common form of arthritis causing disability (Bell, 1989).
  - Gouty arthritis--inherited condition more common in males.
- Bursitis - in the joints where tendons or muscles pass over bones are bursae or pockets containing small amounts of fluid. Infection, calcium deposits, or trauma cause bursae to become inflamed and the amount of fluid in them to increase, resulting in pain upon movement of the joint. The condition becomes chronic in the elderly with the most commonly affected sites being the shoulder and the elbow.
- Osteomalacia - a bone disease characterized by demineralized bone, in contrast to osteoporosis in which mineralization of bone is essentially normal but bone mass decreases. Deficiency of vitamin D may lead this softening of the bones in older adults. Factors affecting the body's ability to absorb vitamin D such as gastrectomy, liver and gallbladder disease, and kidney impairment may also in time result in osteomalacia. Treatment is dependent upon the cause--malnutrition or gastrointestinal disorder. Because vitamin D may be stored in the body, excessive intake may be harmful.
- Paget's disease - A metabolic bone disease caused by excessive bone resorption and excessive bone deposition. Spontaneous fractures occur easily in those with Paget's disease. Increased bone tissue in the skull may cause hearing loss,

blindness, facial paralysis, and headaches if nerves are compressed by the excess bone growth.

- Osteoporosis: One of the most significant age-related changes in bones is reduced bone mass. As aging progresses, bones become more porous or less dense. This common condition in elderly persons, especially women after menopause, is a gradual reduction in the formation of new bone while the rate of bone resorption remains normal. This produces spotty areas in the bone where much bone matrix has been removed and not replaced, resulting in "porous" bone. Fractures of the hip are the most severe common result of the condition and fractures of the spinal vertebrae the most frequent result. Factors identified as contributing to its development in older age include estrogen deficiency, calcium deficiency (due to both inadequate calcium intake and increased bone resorption), decreased ability to absorb calcium from the bowel with advanced age, deficiency in vitamin D (which has been linked to impaired calcium absorption), and a lack of exercise. Predisposing or risk factors in the development of osteoporosis include genetic factors, gender (women experience a higher propensity for its development), race (whites are prone to higher incidence), nutritional considerations, body build (large frames reduce the effect of bone mass loss), use of caffeine and nicotine, and inactivity (a sedentary lifestyle is capable of promoting bone mass loss).

- Bone tumors - bone cancer develops in older persons generally as a result of traveling through the bloodstream from another cancerous location. Bone cancer can weaken the bone and cause joint symptoms similar to those of arthritis.

- Diverticulitis - blind pockets, or saclike pouches form on the walls of the digestive tract of older persons. These pouches (diverticula) tend to become inflamed, especially in the colon, resulting in the condition called diverticulitis. Initial treatment is through a non-spicy diet that is high in fiber content.

- Parkinson's disease - although the origin of the disease is linked to a deterioration in the integrating centers of the brain, the consequences are reflected in the muscular system. Parkinson's disease is characterized by tremors of the hands and finger, increased susceptibility to falls, and emotional ability. Muscle rigidity and slowness result in an inability to carry out normal activities of daily living, which drastically affects independence. As the disease progresses, standing, walking, and balance are impaired. The disease has psychological concomitants including depression and social withdrawal.

- Myasthenia Gravis - the major symptom of this condition is chronic severe muscular weakness. Rather than being a dysfunction of the muscle tissue itself, myasthenia gravis is a result of an abnormal response by a person's immune system, the result being that muscles do not contract as they normally would in response to stimulation.

- Back pain - this condition usually accompanies age-related changes in the vertebral discs of the spinal column. The vertebrae are normally separated by discs that act as shock absorbers in the vertebral column. With age, the discs my become dehydrated and less compressible, producing diminished flexibility and misalignment. Should the discs become very compressed leading to improperly separated vertebrae, pain results.

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overhead - hints for clients with arthritis

HINTS FOR CLIENTS WITH ARTHRITIS

- Apply heat, either wet or dry, to affected joints.
- Use aspirin for osteoarthritis.
- Reduce weight.
- Avoid strenuous activities--maintain physical therapy when afflicted with rheumatoid arthritis. Use exercises which place a minimum of stress on body joints.
- Monitor for symptoms of depression.
- Use aids so as to obtain deep sleep.
- Make use of devices that assist with self-care.
- In severe cases use footrest at bottom of the bed.
- Encourage person to use affected joint. Maintaining of affected joint in a comfortable position results in deformity.
- Maintain a good muscular structure.

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overhead - interventions for prevention of osteoporosis

THERAPEUTIC INTERVENTIONS FOR PREVENTION OF OSTEOPOROSIS

- Maintain desirable level of physical activity.
- Maintain appropriate postural alignments.
- Use calcium supplementation when appropriate.
- Use estrogen when appropriate.

- Use supplemental vitamin D.
- Use fluoride therapy.

Aging and the Cardiovascular System

Diseases of the heart and blood vessels comprise the major medical problem in the United States at this time. Almost a million persons die each year from one of the diseases affecting this system and reflect a loss equal to all other causes combined. Approximately 4.6 million persons in this country have coronary artery disease, which is the most important cardiovascular disease in terms of mortality. Over two-thirds of the deaths from heart disease occur within the elderly population. The elderly person has to contend with both an aging heart and superimposed cardiac disease--a combination that markedly increases the risk of disability and death.

Coronary artery disease prevalence increases with advancing age and is the most common cause of death with those of advanced age. Reports of the prevalence of the disease vary; one study indicates that 49% of those given assessment for the condition had some degree of the disease (Ries, 1990). Coronary artery disease, although not the only cardiovascular condition seen in the elderly, is the disease most frequently found with the elderly in cardiac hospital units. A large portion of the elderly who survive such diseases are disabled to varying degrees.

Some cells such as skin or blood are self-replenishing, but cardiac cells are not replaced after they are damaged or destroyed. It is difficult to determine which changes are due solely to the passage of time and which are disease-related.

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overhead - age-related changes - heart

AGE-RELATED CHANGES

- The number of cardiac muscle cells is reduced, resulting in a decrease in the volume of blood the heart is capable of pumping.
- Various myocellular mitochondrial enzyme activities frequently decrease with age.
- The oxygen supply to the heart is reduced.

- The amounts of fatty tissue and lipofuscin in the heart increase.
- The heart valves tend to thicken and become more rigid.
- Calcification of the valves is not uncommon over age 60.
- Thickening, hardening, and lessened elasticity of walls of blood vessels occur, especially in arteries.
  - Arteriosclerosis is a vascular change leading to a progressive thickening and loss of elasticity of the arterial walls.
  - Atherosclerosis is a form of arteriosclerosis in which fatty-type deposits appear within the arteries.
- The aged heart contracts and relaxes more slowly than the younger heart.
- Both systolic and diastolic blood pressure increase.
- The period after each heart beat is longer, resulting in a diminished reserve capacity.
- Ventricular arrhythmias occur more frequently in older than younger age groups and are felt as skips or extra beats.

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overhead - age-related disorders - heart

AGE-RELATED DISORDERS

- Hypertension is a consistent elevation of blood pressure which involves the following four systems: cardiovascular, endocrine, renal, and nervous system.
  - Risk factors for hypertension: age, heredity, race, obesity, smoking,

high sodium intake, diet high in saturated fats and cholesterol, and stress.

- Coronary artery disease is the result of insufficient blood flow through the coronary arteries to the heart muscle.
- Myocardial infarction or heart attack is an occlusion of an artery or vein resulting in complete interference with blood supply to a part of the heart muscle.
- Angina pectoris refers to a short episode of chest pain, when the heart is not receiving an adequate supply of blood.
- Congestive heart failure is not a disease itself but, rather, the result of other diseases that have damaged the heart. The condition occurs when the heart is no longer able to deliver adequate blood and oxygen to body tissues.
- Cor pulmonale involves chronic enlargement of the right ventricle of the heart due to a respiratory condition such as longstanding chronic obstructive pulmonary disease or emphysema. This condition can greatly impair an individual's ability to ambulate or perform self-care activities.
- Stroke (cerebrovascular accident) is a condition resulting when the blood supply to any part of the brain is reduced or completely shut off. This may result in paralysis of an arm, leg, or both, or loss of verbal communication abilities. It remains as one of the most common causes of death, disability, and loss of independence for those over 65.
- Transient ischemic attack or small stroke is an early warning of impairment in the blood supply to the brain. If TIAs occur over time, tissue damage will occur, resulting in behavioral changes.
- Aneurysm results from a weakened arterial wall that allows a pouch to form.

If pressure is great enough, the pouch may break.

- Phlebitis refers to an inflammation of a vein, often in the leg. Phlebitis produces conditions by which blood clots may form, break loose, and occlude a major vessel in the pulmonary circulation.
- Varicose veins result when the one-way valve in the peripheral veins undergoes a reduction in efficiency and a slowing of the blood return to the central circulatory system.

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overhead - phases of cardiac treatment

CARDIAC TREATMENT

Cardiac treatmemt is the process of restoring and maintaining a cardiac patient to his or her optimal physiologic, psychosocial, vocational, and educational states. Brammel (1984) lists three phases depending upon the specific clinical situation.

Phase 1: Involved are activities which occur during hospitalization for an acute cardiac event. The major tasks during this phase of treatment include education of the patient and family, psychosocial assessment, progressive ambulation, and necessary intervention.

The practices of increasing the duration of bed rest and refraining from more aggressive ambulation and exercise programs generally lead to a greater degree of cardiovascular deconditioning. Alterations in cardiovascular function are the hallmark of deconditioning. The most fundamental change with bed rest

is an increase in resting heart rate by the end of the first week. Current practice dictates early ambulation and discharge within eight to fourteen days following an uncomplicated myocardial infarction. The goal in this phase is to have the individual independent in the activities of daily living upon discharge.

Phase 2: This phase begins after leaving the hospital and lasts for twelve weeks. The major activity is a monitored exercise conditioning. This phase is accompanied by additional educational programs. The focus is on stress management, behavior modification, nutrition, and coronary disease risk factors identification.

Phase 3: The last phase is a long-term maintenance program beginning immediately after completion of Phase 2. The program is usually not medically supervised and is community based. Other program activities are encouraged so as to achieve an optimal status in functioning.

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overhead - components of cardiac treatment

COMPONENTS OF CARDIAC TREATMENT (Brammel, 1984)

- Physiological, with focus on medical and surgical management, activity counseling, and nutrition.
- Psychosocial, with focus on emotional responses to heart attack such as anxiety, depression, coping with stress, and unhealthy behaviors.

- Establishing desired outcomes which may or may not have work outcomes, yet focus on quality of life from living independently.
- Educational issues, also involving emotional support for those handling the crisis of coronary care. The goals should enhance the elderly patient's understanding of procedures and medications as well as his or her desire to comply with a comprehensive rehabilitation program.

STROKE TREATMENT

The most frequent cause of stroke in older persons is a cerebral thrombosis or blood clot that either diminishes or closes off the blood flow in an artery of the brain or neck. Brain cells supplied by this artery may then die from lack of vital oxygen. The cells of the nervous system are extremely sensitive to a lack of adequate oxygen and cannot tolerate more than a few minutes of impaired blood flow. Other possible causes of a stroke are cerebral hemorrhage, which occurs when a weak spot in a blood vessel of the brain bursts, and emboli (air, fat tissue, cancer cells, or any other material foreign to the blood stream) which occlude a vessel or vessels in the brain.

Care for a stroke victim must focus on neurologic and medical diagnosis, a careful assessment of specific deficits (physical, mental, and social functioning), prevention and treatment of complicating problems, and appropriate formal rehabilitation. Since the most important outcomes for those who survive a stroke are functional improvements and the capability to maintain independence, care must be based on periodic formal and informal assessments of the patient's functioning. Economic circumstances affect rehabilitation options as well as environmental considerations such as capacity for independent living.

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overhead - phases of stroke care

Phases of stroke care:

Acute phase (admission to an acute care hospital to 48 hours post event):

1. Diagnosis and stabilization:
    - Traditional history and physical exam
    - Diagnostic studies
    - Treatment
2. Creation of functionally oriented database:
    - Functionally oriented history and physical
    - Cognitive status, affective status
    - Communication
    - Vision and hearing
    - Swallowing
    - Motor control
    - Sensation
    - Perception
    - Postural control
    - Caregiver evaluation
    - Assessment of ADLs.

Subacute phase (48 hours to 3 months):

1. Rehabilitation to maximize functional gains:
    - Multidisciplinary team approach (team to consist of case manager, physical therapist, occupational therapist, rehabilitation nurse, social worker, speech therapist and physiatrist).
    - Restoration of motor and sensory functioning in the affected limb.
    - Transfers and ambulation.
    - Training and strengthening of unaffected side.
2. Prevention of complication:
    - Life threatening complications:
      Recurrent stroke
      Deep vein thrombosis
      Pulmonary embolism
      Pneumonia
      Seizures

- Complications that may interfere with functional recovery:
  Medication toxicity
  Sensory deprivation syndrome
  Depression
  Spasmocity
  Contractures
  Pressure sores
  Urinary incontinence
  Constipation and fecal incontinence
  Caregiver withdrawal or burnout

Chronic phase (3 months and beyond):

1. Maintenance of functional gains:
   - Continuing family education and support
   - Prevention of complications
   - Intermittent short courses of formal rehabilitation
   - Periodic functional assessment
   - Good medical care
2. Prevention of recurrent strokes:
   - Risk factor modification

Aging and the Respiratory System

The organs of the respiratory system are affected more by environmental factors than are the organs of most other body systems. Respiratory organs are almost constantly exposed to various pollutants in the air, and respiratory infections are experienced by nearly everyone throughout the lifespan. Although age-related changes occur in the respiratory system, such changes are quite difficult to distinguish from chronic exposure to environmental factors.

Respiratory efficiency changes with age, resulting in a reduction in the individual's level of physical activity. Although changes in other body systems contribute to these functional declines, a major cause is the decreased ability of the respiratory organs to obtain and deliver oxygen to the arterial blood. This reduction in oxygen delivery is the primary consideration when focusing on the age-related changes to the components of the respiratory system.

Age-related changes to this system usually do not create a disability unless under conditions of abnormal stress. For most elderly individuals, respiratory efficiency is prolonged by regular exercise which is designed to promote muscle tone and maintain general physical fitness.

AGE-RELATED CHANGES

- Skeletal changes limit rib cage expansion.
- Cartilage in the walls of the trachea and bronchi undergo a progressive calcification, thus becoming more rigid.
- The muscles responsible for inhalation and exhalation, which increase and decrease the size of the thoracic cavity, atrophy.
- Smooth muscles in the bronchioles tend to be replaced with fibrous connective tissue, resulting in reduction in their ability to expand.
- Lungs become less elastic, thus reducing both their capacity and the amount of air for oxygen-carbon dioxide exchange.
- * Change in the walls of the alveoli reduces the surface across which gaseous exchange occurs.

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overhead - resiratory system and age-related disorders

AGE-RELATED DISORDERS

- Tuberculosis is an infectious disease which may attack any organ system but is most damaging to the lungs.
- Pneumonia is an inflammation of the lung in which air flow is restricted from reaching the alveoli where gaseous exchange occurs.
- Emphysema usually accompanies other respiratory dysfunctions and results in the lungs losing their ability to ventilate properly.

- Bronchitis is usually a response to an environmental irritant, resulting in the air passageways producing excess mucus.
- Pulmonary embolism refers to a clot which lodges and restricts blood flow to some regions of the lungs.
- Lung cancer usually coexists with another lung disease with treatment being minimally successful.
- Immunization against influenza and pneumococcus is advocated for persons who are elderly.

Aging and the Endocrine System

The endocrine system consists of six primary glands that work closely with the nervous system to maintain stable conditions within the body. The endocrine system functions through ductless endocrine glands that secrete chemical substances called hormones directly into the blood. Certain chemical substances in the blood play a primary role in controlling secretion, and often the secretion from one of these glands triggers the degree of secretion from another. Endocrine activity is a complicated feedback loop in which the interactions maintain the necessary equilibrium regardless of changing demands on the system.

The endocrine glands are ductless, and the only means they have of conveying their secretion to other parts of the body is by the bloodstream. Although these hormones are transported throughout the body, each hormone does not affect all the body cells. Only specific target cells respond to any one hormone because of the presence of specialized receptors. When a hormone attaches to a receptor, a strand is released to the cell which gives direction to various cellular functions.

Compared with other organ systems of the body, the endocrine glands do not show consistent and predictable age-related changes other than gradual slowing and perhaps a less efficient function in the older person. Diseases associated with endocrine functioning may occur at any age, and over time the system remains remarkably stable. This material was developed primarily because of the additional risk of diabetes among the elderly.

AGE-RELATED CHANGES

- Pituitary gland--a slight reduction in its blood supply, its cells become more tightly packed and modest reduction in weight.
- Thyroid Gland--shows a gradual decrease in activity, and atrophy causes a modest decrease in mass. The thyroid gland will experience an increased deposition of fibrous tissue between the follicles and a reduction in the size of the follicles.
- Parathyroids--no significant atrophy, yet a structural change as the result of an increase in fat deposition between their cells.
- Adrenal glands--a gradual reduction in hormonal secretion and a modest composition change with fibrous tissue replacing degenerating cells.
- The gonads (ovaries and testes)
  - Ovaries--reduction in amount of estrogen secreted which triggers the beginning of menopause. The aging ovary experiences progressive atrophy and an increased formation of fibrous tissue.
  - Testes--reduction in size and firmness as well as a reduction in the production of testosterone and sperm.
- Pancreas--some atrophy of the pancreatic cells that synthesize insulin.

AGE-RELATED DISORDERS

- Pituitary gland--no highly significant disorders.
- Thyroid gland
  - Hypothyroidism is an underproduction of the basic thyroid hormone with accompanying symptoms such as weakness, fatigue, cold intolerance, memory impairment, headaches, weight gain, and dizziness.

- Hyperthyroidism or overproduction with symptoms of weakness, fatigue, weight loss, nervousness, palpitations of the heart, heat intolerance, and shortness of breath.
- Goiter or an enlargement of the thyroid due to inadequate iodine uptake.

- Parathyroids--no significant disorders.
- Adrenal glands--no significant disorders.
- Gonads
  - Testes--no significant disorders.
  - Ovaries--must be monitored along with the entire female reproductive system for malignancies.
- Pancreas--no age-specific disease, but an increased incidence of diabetes among older adults.

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overhead - health factors and diabetes

DIABETES MELLITUS

Diabetes is a serious health problem because it has a negative impact on virtually every bodily system. Diabetes is characterized by an elevated blood sugar due to interference in carbohydrate, fat, protein, and insulin metabolism. It damages the blood vessels, which reduces the flow of blood to the eyes and contributes to heart disease, stroke, kidney disease, and infections that are difficult to heal.

The two major forms of diabetes mellitus are the insulin-dependent type, which is often referred to as Type I or juvenile onset, and the non-insulin dependent type, often called Type II or maturity onset. About 1% persons under age 65 develop diabetes, compared to 7% of those between age 65 and 74. Type II diabetes accounts for in excess of 90% of all reported cases of the disease. Most of the non-insulin dependent types are or have been overweight. With maturity-onset diabetes, the pancreatic secretion of insulin remains within normal limits, yet the amount of glucose entering the cells is diminished as a consequence of the receptors on target

cells malfunctioning or diminishing in number. Sources vary on the exact number of diabetics in this country, yet it appears that in the range of 4 to 5% of all Americans have the disease, with the prevalence in the elderly being much higher. Maturity onset diabetes often responds to medication; however, diet and exercise are important corrective measures. Exercise not only reduces the concentration of glucose in the blood but also promotes an increase in the number of insulin receptors on tissue cells.

Reduction in visual abilities is one of the major complications experienced. This systematic disease can cause blurring of vision lasting from a few hours to several days. Poorly regulated diabetics can experience conditions from significant shifts in vision to temporary nearsightedness. When diabetes is uncontrolled for prolonged periods, diabetic cataracts can occur, with associated glaze and dimness of vision. With advanced stages, significant deterioration of central vision may occur. The most serious visual conditions caused by uncontrolled diabetes are retinal detachment, which affects side vision, and the hemorrhaging brought on by diabetic retinopathy.

Other complaints with respect to vision reported by diabetics include a blurring of vision with the loss of ability to discriminate fine details, a shrinking or expansion of objects, visual halos, drooping of eyelids and a doubling of vision.

One serious complication from diabetes is the frequency of sexual dysfunction experienced by both men and women. Most investigators report the incidence of impotence to be approximately 50% in diabetic men, with various treatments not being markedly effective. Women with diabetes have a higher evidence of uterine and ovarian atrophy.

Health factors and health habits to monitor closely in older adults with diabetes are the following:

- Diet should follow the principles of the American Diabetes Association diet and also address such factors as dentition, salivation, and altered taste which may affect the older person's food preference.
- Foot care, because of lessened sensory acuity and the danger of infection.
- Eye care, because of increased likelihood of glaucoma and other visual malfunctioning.

- Urinary system, since renal function is easily impaired and urinary tract infections are common.
- Medication compliance needs to be emphasized.
- Periodic cardiovascular evaluation, as arteriosclerosis is often associated with the disease and heart function may be impaired if vascular disease is present and not treated.
- Regular physical exercise is advocated as an adjunct to diet in the treament of non-insulin-dependent diabetes. The exercise prescription should be assessed on the person's functional capacity.

Aging and the Urinary System

As with other body systems, and under normal conditions, the urinary system remains capable of maintaining relatively stable balances in the blood and body fluids. The aging process appears to result in lessened reserve capacity and reduced efficiency. Despite age-related changes, the system tends to work well until abnormal and abrupt changes occur in body chemistry such as variations in the acid-base balance. The following facts come largely from the work of Spence (1989) and Saxon and Etten (1987).

AGE-RELATED CHANGES

- At age 20, one-fourth of all blood pumped by the heart circulates through the kidneys; by age 80 this is reduced to one-eighth.
- With reduced blood flow, waste products are less efficiently eliminated.
- The number of nephrons is reduced; by age 80 as many as 30-40% of the original number can be lost. Volume of blood filtered per minute is reduced up to 50%.
- Nephrons display a reduction in reabsorption capabilities, often depriving the body of sufficient water supply.

- Reduced reabsorption alters uptake rate of drugs from the blood, resulting in medication buildup in the blood.
- Kidney weight is reduced; by age 90, 20-30% has been lost.
- The ability to regulate proper acid-base levels in the blood is reduced in the presence of sudden changes in body chemistry.
- Muscles in the walls of the bladder and urethra become weakened and less elastic, resulting in a reduction of the bladder's ability to expand or contract.
- Bladder of elderly persons has less than 50% of the capacity of younger persons and tends to retain more residual urine following urination.
- Elderly persons cannot delay need to urinate longer after first receiving a signal; thus, with a weaker external urethral sphincter they may not reach necessary facilities on time.
- Weakening in muscles of the pelvic floor in women as a result of multiple childbirths can lead to urinary leakage.

AGE-RELATED DISORDERS

- Prostate enlargement in males resulting in a compressing of the urethra making urination difficult. Benign prostate enlargement is a disease of advancing age with an incidence of 90% by age 80.
- Prostate cancer is the most frequent tumor of elderly males. Older men should be examined by a physician annually. Carcinoma of the prostate is the second most common malignancy in American men and the third most common cause of cancer deaths in men over age 55.
- Urinary tract infections:

- Cystitis is an inflammation of the bladder most common to older women.
- Pyelonephritis is caused by bacteria that can do serious damage to the urinary tract, leading to progressive renal failure.
- Uremia or chronic renal failure is due to the retention of certain substances in the blood that the kidneys fail to excrete.
- Renal calculi or kidney stones occur at all ages. The presence of these stones in the bladder becomes more common with advanced years. Older persons, because of weakened muscles throughout the urinary system, have more trouble passing a kidney stone.

Aging and Sensory Changes

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show video, *The Sixth Sense*. This is optional if time permits. Video talks about natural age-related changes, thus losses with the five senses and that the sixth sense involves others being sensitive to sensory changes experienced by the elderly

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ELDERLY VISION: VISUAL IMPAIRMENTS

Almost all elderly persons have some degree of visual loss. The vast majority, with corrected vision (glasses), are able to carry out the necessary tasks of daily living and fulfill their societal roles. Changes in the eye may or may not occur at the same rate as age-related changes for other parts of the body. The eye does change with age as evidenced by the following facts taken from Huych and Hoyer (1982) and Hendricks and Hendricks (1977):

- Less than 5% of persons over 100 years become completely blind.
- Only 10% of 80-year-olds have 20/20 vision, contrasted with 40% of 60-year-olds.

- Reports of the loss of visual acuity vary, yet all suggest declines of as much as 30% as the individual moves from age 60 to age 80 (Snellen chart score of 20/50 or worse).
- Seven out of eight individuals over age 45 wear glasses compared to three out of 10 for those younger than 45.
- Fewer than 20% of those over 65 cannot obtain corrected vision to at least 20/40.
- Approximately 10% of those age 65-plus have a visual impairment outside the norm for their age.

AGE-RELATED CHANGES

- Decreased visual acuity results from a decreased flexibility of the lens in the aging eye.
- There is a slight shrinkage, particularly in the pupil (which regulates the quantity of light).
- The amount of connective tissue increases.
- Some cells degenerate.
- Retinal blood vessels develop sclerotic changes with aging.
- Atrophy of fat cushion behind the globe of the eye produces a recession of the eye in its orbit.
- The skin in the eyelids thins, resulting in wrinkling. The eyelids become lax and thinner, and may droop.
- Blink rate is diminished.
- Conjuctiva becomes roughened, thinner, and more fragile.
- Sclera becomes somewhat yellow and may develop small spots that become transparent, allowing the pigments of the choroid to show through.

- Cornea becomes more translucent and increases refractive power.
- Curvature of the cornea changes (astigmatism).
- Tear gland production decreases, which reduces lubrication and cleansing effect.
- Vitreous humour becomes more opaque, reducing the amount of light reaching the retina.
- Lens becomes yellowed, making it more difficult to discern color intensities.
- The quality of dark adaptation is reduced.
- Lens flattens because of increased cellular growth, losing the ability to bend light rays (farsightedness).

AGE-RELATED VISUAL IMPAIRMENTS

- Presbyopia, also known as farsightedness, increases tenfold between age 10 and age 60. Refers to a gradual loss of the lens elasticity, a flattening of its shape, and an increase in its density. As a result, the eye has difficulty in accommodating to near objects.
- For person 65 years of age or older, the leading causes of blindness are glaucoma, macular degeneration, senile cataracts, and diabetic retinopathy.
  - Glaucoma is the most serious eye disease experienced by the elderly and the leading cause of blindness for persons of all ages. Glaucoma results from excessive pressure within the eye. Glaucoma causes visual loss by damaging the optic nerve and retinal nerve cells due to excessive pressure within the eye.
  - Senile macular degeneration: The macula is the central portion of the retina that is necessary for clear

central vision. Macular degeneration results in poor visual acuity or clarity of vision. Macular degeneration is the second leading cause of blindness; the majority of persons experiencing this condition are aged 65 years or older.

- Cataract is any opacity of the lens, regardless of whether it interferes with vision. Ninety percent of people over age 70 have some degree of cataract formation, with 25% of the same age group having well-defined cataracts. Cataracts are responsible for only 1 in 12 cases of legal blindness. There is no effective nonsurgical treatment of cataracts. With modern microsurgical techniques, removal of cataracts is highly successful (improvement of vision in 95% of cases) The decision to operate depends more on the degree to which the cataract influences the older person's lifestyle than on the presence of a cataract.

- Detached retina: Results from the diminished support of the retina as the vitreous humor becomes more fluid, shrinks, and pulls away.

• Blindness: By legal definition is when individuals whose corrected visual acuity in the better eye is 20/200 or poorer, or is restricted to less than 20 feet in its widest diameter. Nearly 500,000 Americans, or a prevalence of 225 of every 100,000, are legally blind. Over 50% of all blind persons are 65 years of age or older. More common among the elderly than any other age group (3% of those over age 65 and 8% over age 75).

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overhead - vision aids

SUGGESTIONS FOR ASSISTING ELDERLY VISION

- Use of large letters (**Bold Face**) where possible.
- Use of bright colors or contrast in colors.
- Use of different colors for doors and walls and reflective tape to mark stairs.
- Reduction of glare through use of alternate floor finishes.
- Increase in illumination where possible.
- Utilization of low-vision aids such as telescopic lenses, magnifiers, or specially devised optical and electronic devices.
- Use of sunglasses or visors to reduce light sensitivity in macular disease.
- Use of talking calculators, scales, clocks, watches, and voice-actuated telephones.
- Use of radio and other reading services.

HEARING: HEARING IMPAIRMENTS

Percentage of Elderly with Hearing Impairments:

- Hearing impairment is the second most common medical problem affecting the geriatric age group (only arthritis affects more).
- Fifteen percent of elderly over age 75 lose their hearing completely.
- Thirteen percent over age 65 have hearing problems serious enough to require treatment on a regular basis.
- Eighty percent of those with hearing loss in both ears are 45 years plus.
- Fifty-five percent of those with hearing loss in both ears are age 65 plus.

- The ratio of persons with hearing losses in both ears increases from 3.5 per 1,000 persons under the age of 17 to 133 per 1,000 persons age 65 plus.
- Thirty percent of the population over age 65 have hearing problems.

THE AUDITORY SYSTEM: AGE-RELATED CHANGES

External auditory canal:

Two of the most common complaints among the elderly are cerumen impactions and itching. Cerumen impactions are the result of a decrease in number and activity of cerumen glands causing a reduction in moisture and increased number of vibrissae (hairs). Complete occlusion of the canal by a cerumen impaction may cause a conductive hearing loss. Itching is related to dryness of the skin, which undergoes senile changes in the cartilaginous portion of the external auditory canal.

Middle ear:

The middle ear includes the medial surface of the tympanic membrane, the ossicular chair, the eustachian tube, and the air space of the tympanic mastoid and petrous apex. Disorders of the middle ear often result in an impairment of sound conduction between the tympanic membrane and inner ear and therefore cause conductive hearing loss.

Inner ear

The inner ear includes the sensorineural auditory and vestibular systems. Hearing loss resulting from inner ear disease is of the sensorineural type.

Presbycusis is a sensorineural hearing loss due to aging of the inner ear. Presbycusis is a slowly progressive, bilaterally symnmeonic decrease in hearing primarily affecting high tones. Sensorineural loss means disease anywhere from the

organ of corti to the brain. The cells within the organ of corti are not replaced; therefore a gradual loss is experienced by all persons. Because of the loss of hair cells in the basal turn of the organ of corti, high tones go unheard as they are detected by these hair cells. With the loss of high frequency sounds, certain consonants and silibants become unintelligible (e.g., f, s, th, ch, sh, z, g, and t). An elderly person would then hear sounds such as -ing, -ame, -one, and -ime, instead of zing, same, zone, and time. The Rinne, Weber, and Schwabach tests make different uses of a tuning fork so the clinician can determine whether the deficit has conductive origins or is of a sensorineural nature.

Tinnitus is the condition of having constant background noise in the ears. It is a subjective ringing or tinkling sound in the ear and is found in certain diseases of the outer, middle, or inner ear. About 10% of persons over 65 years of age complain of tinnitus, which seems to be more common in women than in men.

Hearing loss has psychosocial ramifications because, more than any of the other senses, hearing keeps the individual in touch with the environment. The loss of that ability or some degree of it tends to separate one from the outside world. The reduced ability to hear environmental sounds can have a disorienting and confusing effect. Elderly persons experiencing hearing loss tend both to become suspicious and to withdraw from routine interaction. Withdrawal frequently contributes to depression.

AUDIOLOGIC IMPROVEMENTS

- Assistive listening devices or systems have made tremendous advances such as with infrared sound wave systems. The speaker's tone is transported around a room and picked up by a receiver worn by the hearing impaired person. Another common device is an FM transmitter This transmitter is placed close the sound source. The microphone often is clipped to a speaker's lapel, attached to a television by a plug, or placed on a lectern.
- Telephone amplification devices.
- Conventional hearing aids.

Hearing loss begins at the same time for both genders; however, at age 55 and beyond, men generally experience greater loss which is usually related to former work environments. Extraneous noises that distract or interfere with speech perception should be eliminated. Speaking slowly and distinctly and lowering the voice maximizes a hearing-impaired person's ability to hear and understand. The individual communicating should be aware of the listener's reactions to speech that indicate he or she is not hearing well. Such reactions include leaning forward , turning the good ear toward the speaker, cupping the ear, or a puzzled facial expression.

TASTE

Elderly persons frequently experience a reduction in food intake for a variety of reasons during a period when adequate nutritional intake is vitally important. Nutritional deficiencies can seriously affect the quality of life, even to the extent of the elderly person exhibiting symptoms of senile dementia.

The gustatory or taste system, while basically removed from psychological functioning, resembles the other sensory system in that a stimulus must be of sufficient magnitude to activate receptor organs and associated nerve tracts. If the stimulus is below the organ's threshold or if the receptors are not working properly, no stimulating message is received by the brain. Generally, threshold levels increase with advancing age and, the more specialized the sense, the greater the environment of change over time.

The receptors for taste are sensory cells located primarily in the taste buds on the tongue. Other taste buds are found on the roof of the mouth and in the throat. Four different taste sensations have been identified: sweet, salt, bitter, and sour. Each of the specific tastes is detected best in specific regions of the tongue.

Food substances must be in solutions or must partially dissolve in the fluids that bathe the tongue in order to be tasted.

AGE-RELATED CHANGES

- The actual number of taste buds is reduced.

- Remaining taste receptors have a higher threshold for stimulation; therefore, a stronger stimulus is required to actuate them.
- Volume of saliva secreted decreases.

IMPLICATIONS OF AGE-RELATED CHANGES

- Food tastes bland.
- Part of a syndrome of loss of appetite from inactivity and reduced social significance.

SMELL

The sense of smell serves a number of functions including providing protection from noxious substances. A reduction in the function of these special receptors reduces the processing of both harmful and pleasant stimuli. The sense of smell is particularly important with the elderly because of its close relationship with the sense of taste.

As with taste, the ability to smell remains functional across the lifespan, yet the intensity with which an odor is perceived declines from the third decade on through life. A reduction in the ability to smell can be detected by a variety of methods, including individuals not being aware of their own offensive body odor or not responding to pleasant odors produced by flowers or perfumes.

The sense has long posed a problem for investigators because humans are not dependent upon it as are lower animals. The receptors of smell are specialized nerves located in the nasal mucosa of the upper portion of the nasal cavity. To be detected an odorous substance must dissolve in the mucous layers covering the receptors and interact with them. This interaction depolarizes the receptors, and a message is sent by way of nerve impulses to the brain.

AGE-RELATED CHANGES

- The number of olfactory receptors is reduced.
- The number of fibers in the olfactory nerve is reduced.

IMPLICATIONS OF AGE-RELATED CHANGES

- Reduction in a defensive response to a noxious stimuli.
- Reduction in the pleasure of food consumption.

TOUCH/PAIN

The tactile sense refers to the ability to distinguish stimuli from objects through normal stimulation of the skin, the viscera, and those sensations producing stimuli in the muscles and joints. Behavioral implications often concern personal safety, as the elderly are in delicate equilibrium with their environment.

Touch is necessary in order to orient ourselves to many aspects of the daily environment and thus prevent accidents. When touch receptors are not working properly, burns are likely if the older person is not accurately perceiving temperatures. Falls often occur as a result of inadequate touch receptors on the soles of feet.

Changes in the threshold of touch and pain may be due to aging and also to the increased probability of the occurrence of injury or pathological conditions that affect the skin, the receptors, or the nervous system. The results of most clinical studies indicate that the sensitivity of the feet starts to decline at an earlier age, particularly as contrasted to the upper extremities. This decrease is related to both nerve receptor changes and a reduction in circulation. Sensitivity to light touch on both the palm and thumb have been consistently less in older persons as compared to the young.

Difficulty in recognizing pain has serious implications with respect to burns, bruises, or falls. There appears generally to be a significant increase in the amount of time needed to reach a pain threshold. Heat-induced pain shows a marked decrease in advanced age, particularly among women. Chronic diseases such as the presence of arthritis condition the elderly person to raise their threshold to pain and therefore not respond as readily to additional noxious stimuli.

The role of the rehabilitation counselor is progressively becoming more important as more is learned with respect to chronic pain and its management. Although reaction to pain is to some extent dependent on cultural and social factors, emotional contributors can be reduced. Counselors focusing on the relief of fears, anxiety, and tension are valuable reha-

bilitation team members. Suggestion has been shown to have marked influence on the intensity of experienced deep pain, such as following surgery, particularly among the elderly and the use of placebos.

Aging and the Kinesthetic and Vestibular Senses

Kinesthetic sensitivity refers to a somatic sense that provides an awareness of the body's spatial location. It involves receptors found in muscles, joints, and the vestibular apparatus of the inner ear. The system provides information on joint movement as well as body position in space. The data provided by this network are extremely important in mobility and the prevention of accidents.

Problems with these senses are difficult to trace because of the interfacing of multiple mechanisms and the increased incidence of individualized effects of aging on a given body system. This is further compounded because some of the same receptors are involved in processing strain stimuli when resistance to limb movement is encountered.

The vestibular system, which is found in the inner ear, provides additional information related to equilibrium and balance and therefore is significant for mobility and accident prevention. The fluid balances in the semicircular canals of the inner ear act much like the gyroscope or artificial horizon in an airplane, with each extending in a different plane. Each of these canals contains a liquid that activates tiny hair receptors that transmit signals when equilibrium is disturbed.

Knowledge of this system is important because of the increased incidence of falls with the elderly. Accidents are the fifth leading cause of death in the older population, and falls constitute the largest percentage of accidents. Those over the age of 75 have the highest rate of both falls and fall-related injuries, and it is thought that many are unreported because they are forgotten.

The elderly person seen by a physician for an adverse condition as the result of a fall may have been falling for some time. It is in the area of social functioning that falls take their greatest toll. The fall suggests increasing dependency, causing social withdrawal that can result in other consequences such as poor nutrition. Gait changes are also significant as velocity is important in maintaining stability. The highest rate of falls occur in those with 50-60% of normal gait velocity.

AGE-RELATED CHANGES

- Sensory receptors are gradually lost in both vestibular and kinesthetic senses.
- Higher thresholds of stimulation occur in both kinesthetic and vestibular systems.
- Body sway increases.
- Equilibrium and balance are reduced when fast movement is required.

AGE-RELATED DISORDERS

- Increased complaint of dizziness.
- Increased complaint of faintness.
- Increased incidence of falls, especially on stairs, due to diminished testing of kinesthetic system.
- The fear of falling increases the risk of a fall.

SUGGESTIONS FOR REDUCTION OF AGE-RELATED CHANGES IN MOBILITY AND BALANCE

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overhead - suggestions on mobility and balance

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1. Exercise
   (a) improves muscle and joint strength.
   (b) reduces body fat.
   (c) improves posture.
   (d) increases bone mass.
   (e) maintains reaction time.
   (f) improves blood flow.
   (g) improves confidence and security in movement.
2. Good nutrition because the lack of certain nutrients has been linked to diseases affecting mobility and balance.
3. Maintenance of other senses; vision, hearing, and touch all provide cues with respect to balance and mobility.

Aging and Mental Health Conditions

An irony of mental and physical health is that it is often defined by its absence. Persons are said to be mentally healthy if they do not possess any recognizable psychiatric disorder. Mental health, like physical health, is a continuum, with the line between normal and abnormal rarely sharp. Professionals often lack total agreement on origins of symptoms; for example, memory complaint is related by some to changes in brain structure and by others to social isolation or the lack of stimulation. The problem is exacerbated by the fact that professionals seeing an elderly person presenting a mental condition for the first time in their life often lack a psychiatric history of the individual.

To various degrees, a disability causes a crisis. The degree of the crisis is roughly equivalent to the person's loss of ability and his or her interpretation of that loss. Everyone has a manner in which they respond to a crisis, and this is followed by a period of adaptation. Frequently, during the crisis some people develop disordered behavior. This disordered behavior is often the result of a series of losses that occur in a brief time span.

AFFECTIVE DISORDERS

Show class video, *Depression and the Elderly*. Tell participants that while this is an institutional setting, the video makes good use of principles of the condition.

Depression occurs frequently in elderly persons and particularly with the onset of a disability. Depression, if not recognized or properly treated, is also a predictor of rehabilitation failure. Depression leaves the disabled individual poorly motivated, pessimistic, and easily fatigued. Likewise, the treatment of depression influences motivation, intellectual function, memory, and the capacity for learning.

Various sources continue to report that approximately 25% of the well-functioning elderly have at least a mild degree of depression. Fifty percent of the victims of stroke, according to Robinson (1987), have a diagnosable depression, and virtually 100% of persons in the early stages of a dementia experience depression. Elderly persons with depression frequently mask the condition and, rather than complaining of sadness, will complain of physical symptoms of ill health.

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overhead - categories of depression

Depression is the most common psychiatric disorder of old age and is referred to by Seligman (1975) as the "common cold of psychiatry." It is the major affective disorder, as noted by the high rate of suicide among the elderly. Plopper (1989) advances five categories of depression with regard to elderly individuals following the onset of a major disabling condition:

1. Adjustment disorder with depression: consists of an excessive depressed mood as a reaction to an identifiable psychosocial stressor.

2. Dysthymic disorder: consists of a chronic depressed mood existing for at least two years. Lesser degrees of this type of depression usually are present from an earlier period, with advances in the condition with the onset of a disorder such as rheumatoid arthritis.

3. Major depression: consists of a more acute onset, is likely to culminate in a suicide attempt, and is reflective of a loss of pleasure in all areas of one's life.

4. Dementia with depression: consists of a depressed mood as the victim attempts to deny memory loss.

5. Organic mood syndrome: implies evidence of a specific organic factor related to the depressed mood. Typical organic factors include hypo- or hyperthyroidism, excessive psychotropic medications, and left hemispheric lesions.

An accurate diagnosis usually includes the depressed person seeing the clinician at least twice, with the visits purposely scheduled at different times of the day. Information should be obtained from family members relevant to the condition, and all members of the rehabilitation team should express themselves with regard to the suspected condition.

The effective treatment of depression as experienced by the elderly requires a multi-focal approach, including psycho-

therapy, social intervention, and somatic therapies, as medication usually does not work well alone. Older persons, with the exception of the severely demented, respond well to psychotherapy.

True neurotic reactions expressed by the elderly, when manifesting themselves for the first time, occur at an extremely low level of incidence. A "helplessness" anxiety can be present as the elderly have a fear of becoming a burden or their caretakers leaving them. This is accompanied by the fear of losing autonomy and being totally helpless and alone.

Paranoid reactions can accompany sensory declines, particularly hearing loss. The elderly person with hearing loss can hallucinate a new world to fill the void created by real world sensory loss. The loss of auditory contact leads to an inner reliance, and if this is something newly created, the individual will begin to misinterpret auditory stimuli. Through clear communication of alternative interpretations, environmental threats can be reduced.

ORGANIC MENTAL DISORDERS

Show class video, *Detecting Dementia: Cognitive Assessment by the Home Health Care Professional.* 20 minutes. Tell participants that while this video speaks to professionals in home health, it does accurately display real-life situations of persons in the community. Discuss the fact that the lady had the blinds pulled and the room was dark - that is an important clue showing signs of depression accompanying dementia.
Show class video, *Helping People with Dementia.* 23 minutes. Practical aspects of helping victims help themselves.

The case manager, when confronted with an elderly person with an organic mental disorder, should reaffirm the position that these conditions share the common thread with many of the other disabling conditions experienced by the elderly because they are chronic in nature. A chronic condition implies that there is no cure; however, the basic principle of independent living still remains: "helping someone reach his or her highest attainable level of skill and function." Keeping with the independent living model, function must be emphasized over cure, with ability and disability being just as important as reversibility and irreversibility.

Estimates on the prevalence of organic brain disorders in the elderly suggest that approximately 5% suffer moderate to severe impairments, or approximately 15% if mild organic mental disturbances are included. Of those elderly with organic brain disorders, 10 to 20% are estimated to have potentially reversible or remedial states (delirium), while approximately 80% have primary degenerative dementia. Of those with primary degenerative dementia, Alzheimer's disease probably accounts for approximately 60%, while approximately 15 to 25% are due to multi-infarct dementia. The remainder are mixed Alzheimer's and multi-infarct dementias, along with some rarer brain diseases such as Pick's disease, Huntington's disease, Parkinson's disease, and Creutzfeldt-Jakob syndrome. An organic brain syndrome refers to a grouping of behavioral symptoms manifesting without identification of etiology. True organic mental disorders refer specifically to conditions where the cause is known, such as a stroke.

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overhead - criteria of a dementia

The American Psychiatric Association gives the following criteria of a dementia and the order of their occurrence, differing from one disease to another (American Psychiatric Association, 1980). Generally, with Alzheimer's disease the first symptom is an increased paranoia and depression.

- Impairment of intellectual function
- Impoverished and concrete ideation
- Progressive disorientation
- Memory loss, particularly of recent events
- Impaired judgment
- Shallow affect and emotional blunting.

Hays and Ernst (1987) report that the cost of the care of the 2.3 million persons suffering from moderate to severe dementia is in excess of $30 billion annually. The pain and suffering of family members are even more difficult to measure. If the institutionalization of those receiving care by family members can be delayed six months to a year through appropriate interventions, case management efforts can have a significant economic impact.

CASE MANAGEMENT AND INDEPENDENT LIVING FOR PERSONS WITH DEMENTIA

Alzheimer's has some unique aspects. Persons with any of the dementias can participate only in a limited manner in the formulation of their care plan. Traditionally, the caregivers become the executors of care plans, and these dedicated persons need a frequent respite from their daily burden. Weiler (1987) estimates that, for every person suffering from a dementia, three times as many close family members are deeply affected by the emotional, physical, social, and financial burdens of giving care.

A second aspect of a dementia is that it is not only chronic but progressive, with a continued decline in function. More than with other chronic conditions, the care plan needs to be reassessed and modified frequently. The case manager, through familiarity with the natural course of the disease, can provide caregivers with effective anticipatory guidance.

A major problem in the care giving process is the prevention of excess disability. Coexistent medical illness is frequently present. The victims may be less aware and communicative regarding symptoms of disease. The diagnosis of coexistent illness usually depends on the recognition of sudden changes in functional ability rather than complaint. The case manager needs to be able to advise family members as to community resources such as the availability of respite care, adult day care, in-home care, assisted living, and nursing facilities. The case manager should be aware of the growing list of books available for caregivers, such as the following:

Heston, L., & White, J. (1983). *Dementia: A practical guide to Alzheimer's disease and related illness.* New York: W. H. Freeman.

Mace, N., & Rabin, D. (1981). *The 36-hour day: A family guide to caring for persons with Alzheimer's disease, related dementia, illnesses, and memory loss in later life.* Baltimore: Johns Hopkins Press.

Powell, L., & Courtice, K. (1983) *Alzheimer's disease. A guide for families.* Menlo Park, CA: Addison-Wesley.

Zarit, S., Orr, N., & Zarit, S. (1985). *The hidden victims of Alzheimer's disease: Families under stress.* New York: University Press.

TOPIC

C. CARE PLAN DEVELOPMENT

AT THE COMPLETION OF THIS SESSION, THE PARTICIPANT WILL BE ABLE TO:

OBJECTIVES

1. Understand the basics of care plan writing.

Writing the Care Plan

Care planning is the process by which information gathered during assessment is translated into a package of services. The assessment process seeks to determine the unmet needs with the consumer. Assessment is like examining the pieces of a puzzle (unmet functional needs or problems with independent living). Care planning is like putting the pieces of the puzzle together (a plan to meet the unmet functional needs or solving the problems associated with independent living). It is important to make clear to the consumer at the time of the needs assessment that it is not a process of guaranteeing the availability of a service. Further it is important, that at the time of the assessment that the agency's philosophy be discussed. The consumer must understand that the care plan first considers the tasks currently being provided by the informal network (family) and other community resources, including church programs. It is important that the consumer be involved in the process and have a full understanding that the attempt is to provide support and services in order for them to remain independent for as long as possible.

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overhead - care planning what it is

The care plan is the connective tissue that links and holds the services together based on the results from the needs assessment. It represents the plan of action taken by each team member on behalf of the consumer. It is a statement of what the individual consumer can expect from service providers. The care plan tells the story of the consumer's strengths and weaknesses, needs and problems, and how to achieve a change. There is a beginning, middle, and end. The middle is the revision at necessary intervals at which time the care plan is evaluated in terms of helping the consumer meet the original goals of the initial care plan.

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overhead - care planning principles

Determining the amount and type of service a consumer is to receive depends on many factors. Each applicant situation is very different and must be treated accordingly as there is considerable variability among the elderly in the ability to carry on the activities of daily living (ADLs). When an elderly person has a stroke or a hip fracture there are no predictable functional changes. A stroke patient does not always lose the ability to perform an ADL task. The loss of functional ability to perform an ADL task requires the identification of deficits concomitant with assessed impairment. The significance of an organic or pathologic diagnostic label must be interpreted individually with each elderly person in order to identify the behavioral implications, and this will be reflected in the care plan. Only if evaluation has been done with a functional emphasis is it possible to help the consumer through the care plan to think in terms of *self-help*. The alternative is to evaluate the aged as we do with the young, examining range of motion, strength, spasticity, and so on as the primary emphasis, which can only lead to a reinforcement of loss rather than self-help. The young tend to have more psychologic stamina and broader support networks thus the lack of functional emphasis does not impact as severely as for the aged. The process of care through the care plan must support the psychological and social aspects of independent living.

A service plan must be derived in terms of the problems or issues presented and not in terms of services that are available. Services should be authorized in a manner that are least intrusive, have measurable goals to meet the consumer's needs, and are cost effective. The case manager should make sure he/she does not create dependency by giving more services than are needed. Remember, it is easier to increase services than to decrease them.

It is important for the case manager to keep in mind that care plans are not set in stone and often change. The monitoring and reassessment should identify when or if needs have been met, how services should be altered to meet them, or establish new goals and strategies to address needs. Whenever it is determined that a plan is to be one of a short term duration such as when an applicant has a fractured limb, when the caregiver will be away temporarily, or when

the applicant has expressed he/she was independent before and does not want services long-term, the case manager should note this in the narrative and the service authorization should be written accordingly. It is important that the applicant understand the short-term authorization period as well. Practicing case managers emphasize the point that knowledge of common medical conditions is essential so that the care plan will reflect planning that coincides with the normal course of a given acute or chronic condition or a disease.

The care plan should be based on known gaps in informal and formal supports. The case manager will also need to consider whether there are special factors such as elder abuse or neglect issues or a hospital discharge situation. It is important to constantly update the list of informal and formal supports and to educate the consumer and his/her family that the agency supplements what is already in place. The care plan should give in detail the services currently being provided by both the formal and informal networks. In organizing a service plan, other factors to be considered are: the applicant's lifestyle and needs; his/her ability to perform tasks, i.e., how does the person function in each specific area addressed (Activities of Daily Living, such as bathing, meal preparation), who, if anyone, has been assisting the applicant; as well as the frequency and reliability of the assistance. It is crucial to know the usual manner of accomplishing a task and the agency's ability to meet that need as well as its limitations. A major consideration involves economic considerations, e.g., before choosing a homemaker service for a consumer, it is possible that all that is needed is home delivered meals, or a shopping service. Also, it should be considered when authorizing services if every other week is adequate compared to a weekly schedule.

Financing that underlies the case management agency's program fundamentally shapes the nature of the care planning process. A case manager working with a Medicaid Waiver program functions very differently from a case manager who writes care plans in a program financed exclusively by Title III of the Older Americans Act. The primary difference is that in the waiver programs case managers have purchase power in the form of service dollars to spend on behalf of the consumer, while in the Title III program case managers primarily make referrals. Case managers have direct access only to providers under contract with the Older Americans Act funds. Case managers who

function as brokers write care plans and make referrals. There is no guarantee, however, that those referrals will result in service delivery. The broker case manager does not have as much clout and leverage with providers. The broker acts as an advocate on behalf of the client, attempting to increase providers' responsiveness to his or her clients' needs, but there is no way the broker can guarantee service provision.

A key issue is whether the care plans are systematically costed out. Do case managers know what they are spending? What is the breadth of services case managers can buy, and how broad is their involvement in the delivery system? For case managers in service management or managed care models, the selection of an array of services for his or her consumers, as outlined in the care plan, has significant cost implications. Case managers operating within specific budgetary limits must be able to judge when the consumer's community or in-home care plan will exceed the cost of providing a comparable level of care in a nursing home. Case managers' skill in making these choices and estimates is an important factor in controlling long-term costs.

Involvement of clients' informal caregivers is also an essential part of the care planning process. The goal is to negotiate feasible informal support in combination with formally provided services. The case manager can assist in stimulating and enhancing consumers' independent functioning and supporting consumers' caregivers. Caregiver support services may become a significant component of the care plan. The case manager may be able to identify new sources of informal support and strengthen existing sources by expanding the support network. Case managers often find that clients are referred when their caregivers have reached the point of "burnout." In these cases, the case manager's consumer is both the older person and his or her primary caregiver.

The case manager's position in developing the care plan should be around the notion of making the consumer's life as positive and fulfilling as possible. The care plan process should include:

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overhead - the care plan process should include

- building a trusting relationship and a sense of competence in the consumer.

- Searching for, and building on, the person's remaining capacities. The capacities should include emotional capacity, awareness of and responsiveness to their living environment, social capacity, capacity to communicate, and the capacity to make logical decisions.
- looking for ways to add meaning to the consumer's life which enhance motivation for self-help.

There is currently little agreement across the country with respect to the format of care plans. The medically oriented programs tend to use case files that combine assessment and care plan information in a problem-oriented record. Few if any care plan formats allow for the fact that the original plan drafted by the case manager undergoes many changes in the process of gaining consumer consent and obtaining commitments from service providers. Usually commitments are obtained by telephone as opposed to providers being part of the care plan session. Few service plan formats allow for recording actions or services that would have been ideal but that were not feasible and the reasons why. Many programs use a care plan that deals only with formal services to be obtained for the consumer. In general, the care plan should record:

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overhead - essential components of the care plan

- **The problem statement** - must answer three questions. Why is the consumer seeking services? What specific problems require service? What is the specific problem(s) to be addressed by the case management agencies and its contractors?
- **Goal Statements** - must answer the following questions. What are the specific aims of the case management services? What specifics will result from the services? What is the expected date of goal achievement?
- **Listing of Assets** - helps the consumer achieve the goals of the care plan. This listing needs to include personality and emotional characteristics, community resources, and family support.

- **Listing of Barriers** - which hinder achievement of goals and include personality and emotional characteristics, community resources, and family support.
- **Intervention or modality** - refers to sufficient information in the plan to confirm the need for this kind of intervention.
- **Clinical impression or diagnosis** - is crucial to understanding the course of the condition and the anticipated duration of case management services.
- **Review Date** - includes month, day, and year such as 1/10/96.
- **Name and credentials** - of each person who was present and participated in the development of the plan, including those contacted by telephone.

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overhead - what the care plan should also contain

- the desired outcome (objectives);
- what is to be done by the consumer (such as informing relatives, requesting services directly, self-care);
- what is to be done by family, friends, or neighbors;
- what is to be done by the case manager;
- what is to be done by other workers in the agency;
- what is to be obtained from other agencies (in what sequence, for what duration, how paid, whether additional specialized assessment is needed, what services are desired but not available); and
- what events will trigger a new step in the plan, reassessment, or a revised plan.

Rules for Writing the Care Plan

Mark Twain once said to would-be writers, "as to the adjective, leave it out." His words have meaning for case managers formulating care plans as when using an adjective, for better or worse, is giving an opinion. Therefore, adjectives must be carefully chosen, or even replaced, if the language is to be clear and precise. The misuse or overuse of adjectives

tend to mystify or complicate interpretations of problems and their solutions. Timeliness in writing is critical in portraying an accurate image as waiting one day can blur accuracy. This notion is critical in the writing of goal statements. We give the following examples:

- A frequent goal is *improve hygiene*. The statement is vague and fails to tell enough of a story. Being more specific is generally superior such as *brush teeth and bathe each day*.
- *Learn to become more independent* has multiple interpretations from setting up a business to leaving a mate. It would be superior to say *get up in the morning and prepare breakfast*.
- *Increase self-esteem* is another favorite goal, yet as stated it is difficult grasp. It would be better to write *will not be critical of self*.

Your consumer should be an active participant in setting goals and writing the care plan. Document the consumer's participation, perhaps including his/her signature. Set goals the consumer will understand, agree with, and accept. Objectives must be specific, measurable, and meaningful to the consumer. Set a date for achievement of those goals, Define the methodology to be used in goal achievement. Do not create doubt as that is the work of lawyers. Use words that are specific and not leave room to indicate opinion as that has the potential to damage or destroy the case manager's credibility.

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overhead - rules for writing effective goals

Rules for writing effective goals:

- Be concise. Avoid unnecessary words and repetition.
- Be consumer oriented. It should describe an action of the consumer or a change in the consumer's condition.
- Use action verbs. Example: speak, walk, transfer, participate, identify, give, demonstrate, wash, decrease, increase, read, reduce, begin to...
- Specify content. The content is the object of the action verb. It identifies the area of change in the resident's condition or behavior that should

be observable when the goal is achieved. Describe what is expected to occur.

- Add measurable factors. Avoid phrases that require subjective judgement. Use phrases that describe concrete, objective, measurable occurrences - amounts, numbers, facts, ect...
- Use modifiers. Modifying words or phrases define the content areas as precisely as possible. Modifiers answer questions when, where, how, how much, how far, with what help, with whose help, etc...
- Avoid ambiguous terms. Words like "better," "worse," "good," "bad," "more," "less," require further specification. They can mean different things to different people.
- Use a common language. Make certain everyone concerned knows all the terms, abbreviations, codes and symbols used.

Goals are statements of expected consumer behavior or health status at a time in the future. Goals state broad general aims of interventions. An example of a goal would be to "maintain the consumer in their home as long as possible." More specific guidance for the care plan is expressed in attainable objectives such as: "protection," "maintenance at home," and/or "alleviation of stress" that implement the steps or services necessary to accomplish the objective. Goals provide:

- motivation, direction and concrete objectives to be achieved;
- a sense of accomplishment for resident and staff;
- a means to evaluate the consumer's response to services and quality of services given.

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overhead - types of goals

Types of Goals:

- Improvement goals - describe and project a higher level of physical, psychological or social functioning than the consumer is presently capable of.
- Maintenance goals - are directed at keeping the resident at his/her present level of health,

functioning, and/or slowing the rate of severity of deterioration in his/her condition.

- Preventive goals - are aimed at preventing complications whether those associated with the problems under consideration or with the approaches or medications used in the management of a problem.
- Palliative goals - are directed at making the consumer more comfortable by providing for the reduction of, or temporary relief from disabling symptoms.
- Coping goals - are directed at helping a consumer understand, accept and develop a positive attitude toward and/or compensate for his condition or limitation(s).

Care Plans used in Community-Based Services

There is not a standard form in Texas for care plans. (handout two typical ones). Community-based case management programs do not place emphasis on writing elaborate goals, as generally the same goal applies to everyone, and that would read something like, "assist the resident in maintaining the ability to live in their home with the care and services they need." The individual services become the objectives through which the goal is obtained. An example of an objective could be to arrange for *meals-on-wheels*. Another objective might be to "arrange for transportation." Practicing case managers stress that community-based services do not use specific goals such as "the consumer will be able to bathe themselves without assistance." They use a summary page that does not use specific outcomes, rather with the provision of a specific service; such as "the consumer will be able to remain in their home enjoying independent living." Care Plans for community-based services do not break objectives down into component parts such as steps or approaches to objective obtainment.

The care plan mirrors the problems uncovered in the assessment phase, with the exception that the care plan lists problems to be addressed with the most difficult one first. This is not a written rule, however it is a general practice. The rationale for this is that in packaging services and contacting providers the case manager works from top to bottom covering the most pressing and harder functional

needs first. They are the priority and the most essential for the consumer to remain in their home.

The care plan begins with what service the consumer needs. Community-based care plans are written in a practical manner such as XYZ provider will be called and requested to provide a specified quantity of a service. The consumer is an active partner in the development of the care plan, and not the case manager saying, "you need a certain service." Instead the case manager should say, "bathing seems difficult for you, would you be interested in the assistance of a homemaker. If they respond yes, then the service is pursued. Also, they are endorsing the process.

Care plans are to be written using language common to the consumer, and not language specific to a certain discipline such as social work or nursing. Tell the consumer which contractor could help meet their needs. The care plan should tell the quantity of service the case manager and the consumer deem appropriate such as assistance with bathing four times per week. The case manager needs to inform the consumer that the quantity of a service requested is not necessarily what will be delivered. The quantity has to be congruent with the level of funding that a contractor can be reimbursed to provide.

The consumer, or responsible party, signs a form when it shows what services are needed. The signature gives the case management agency permission to work on their behalf in obtaining needed services.

When back in the office, the case manager begins completing each service needed by contacting the appropriate provider for a given service. It is important to document dates and to whom a service is referred. The original consent form gives the case manager permission to share information with the contract provider. The contract provider is given a summary (by telephone) of the problems confirmed through the assessment. The provider is only given enough information to justify their service. Consumer information not relevant to that service is not given.

The case manager tries to contact the needed providers within two-working days. She contacts all clients once a week by telephone, inquiring as to how services are working. Often the contractor provides information with respect to a change in the consumer's status. A variance exists with respect to the frequency the case manager is in each home, from once a month, even when their are no apparent problems to once a quarter. The case manager documents the

resident's condition at these monthly visits, even when everything appears stable.

While this training has talked about long-term care case management, not all case management is long-term. In some instances when a consumer's situation is stabilized, the case manager withdraws. This is what is referred to as short-term case management. Should the consumer's need change, the case manager is recalled and enters the equation for another period. The reason for short term is that it releases the case manager to serve additional consumers.

TOPIC

D.PRACTICUM (or class activity)

It is suggested that a practicing case manager make presentation if on-the-job experience cannot be arranged. In this instance, the case manager would work the class through a simulated assessment and care plan development. An alternative could be that the faculty member generate a brief description of several persons needing case management, divide the class into small groups and have them do an assessment using Form 2060 followed by the development of a Care Plan

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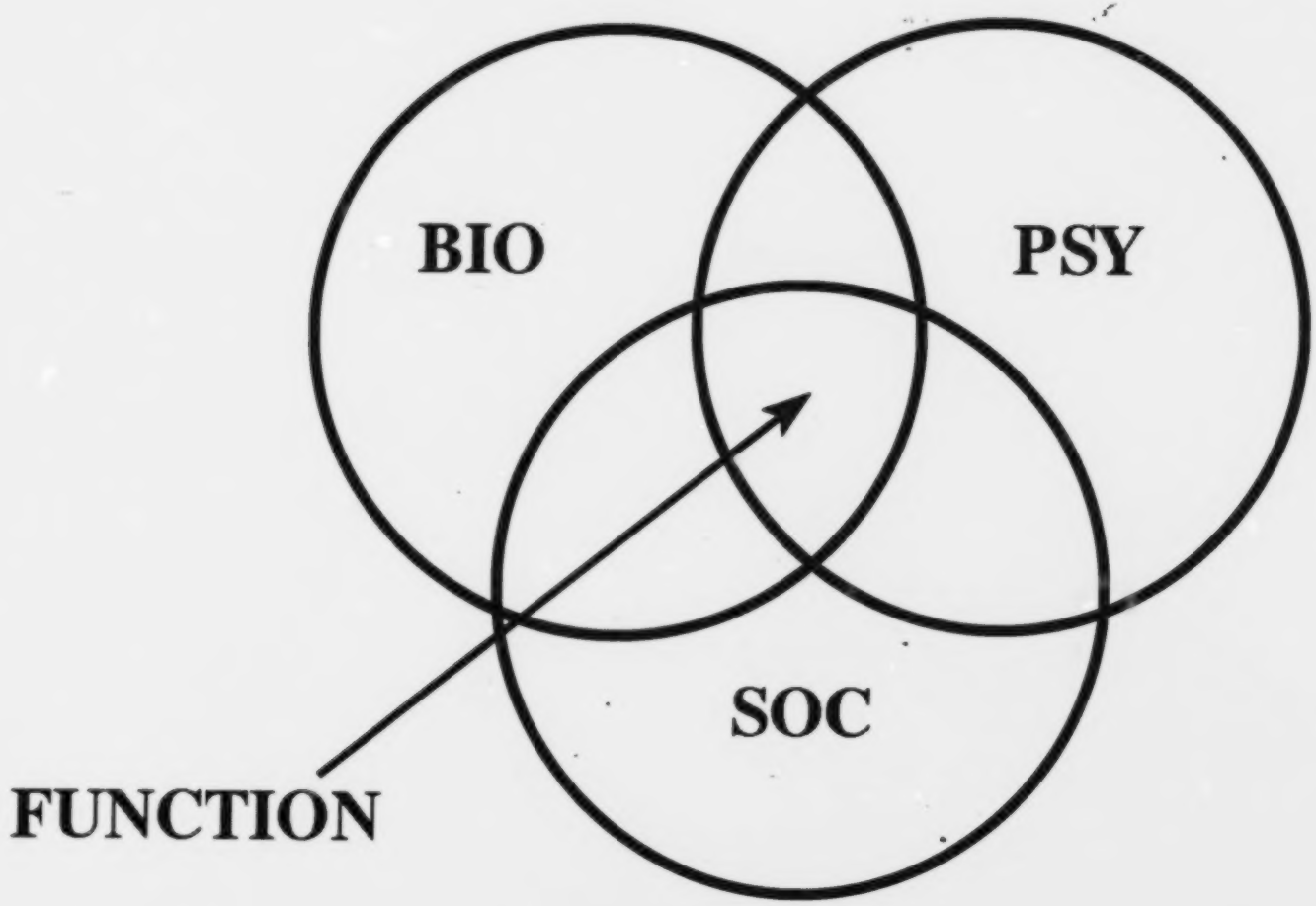
FUNCTIONAL ASSESSEMENT EXAMINES THREE MAJOR LIFE REALMS



FOLLOWING THE ONSET OF A DISABLING CONDITION:

- 40% of Persons Non-Aged and Disabled Have a Rate of Improved Functioning without Counseling.
- 65% of Persons Non-Aged and Disabled Have a Rate of Improved Functioning with Counseling.
- 10% of Persons Aged and Disabled Have a Rate of Improved Functioning without Counseling.
- 65% of Persons Aged and Disabled Have a Rate of Improved Functioning with Counseling.

ITEMS IMPORTANT FOR INDEPENDENT LIVING THAT CASE MANAGER SHOULD CONSIDER AT DISCHARGE FROM HOSPITAL

- Teaching of New Skills
- Sources of Life Satisfaction Change
- Diminishment of Self-Esteem

ASSESSMENT SHOULD INCLUDE:

- **Behavioral Competence**
  - **ADLs**
  - **IADLS**
- **Psychological Well-Being**
  - **Including Attitude of Caregivers**
- **Quality of Life**
- **Objective Environment**
  - **Suitability and Safety of Home**
  - **Availability of Emergency Services**
- **Financial Status**

TWO PSYCHOLOGICAL PROCESSES NECESSARY FOR INDEPENDENT LIVING

- Capacity to Learn New Skills
- Capacity to Maintain Life Satisfaction

FOUR PSYCHOLOGICAL VARIABLES THAT ARE PREDICTORS OF ABILITY TO LIVE INDEPENDENTLY

- **Motivation**
- **Cognitive Ability**
- **Minimum of Depression**
- **Personality Traits**

TRIPARTITE CONCEPTUALIZATION OF BEHAVIOR

- **Cognitive Functions:**
  - **Perceptual Functions**
  - **Capacity for Orientation**
  - **Memory and Learning**
- **Executive Functions**
  - **Appropriateness of Social Responses**
  - **Formulation of Goals**
  - **To plan and to Carry Out Goal directed Plans**
- **Emotional Functions**
  - **Indicator of Psychological Status**

FACTORS TO CONSIDER WHEN SELECTING AN ASSESSMENT INSTRUMENT

- Yields Comprehensive Functional Information,
- Assists Providers in Care Plan Development,
- Sensitive to Change in Functional Status,
- Keyed to Thresholds with Functional Significance for the Consumer's Well-Being or Independence,
- Justifies Service Eligibility,
- Distinguishes Small Increments of Change,
- Reflects Actual Capabilities,
- Consumer Views as Acceptable,

FACTORS TO CONSIDER WHEN SELECTING AN ASSESSMENT INSTRUMENT

(Continued)

- Acceptable to All Providers,
- It must not Rely on Costly Bulky Equipment,
- Appropriate when Functional Status Varies,
- Satisfies Requirements for Service Initiation,
- Branching Approach which permits Exploration of Areas of Particular Concern,
- Indicates when there is a need for a more Comprehensive Full-Scale Assessment,
- Indicates Appropriateness of Information from Consumer.

RELIABILITY RISKS

- Dependent on Case Manager's Judgment if the Focus is Subjective,
- Function of Intense Rater Training,
- Dependent on Stimulus Provided by Case Manager,
- Case Manager must be Alert to Responses made on the Basis of Content, i.e., Elderly Tend to want to be Agreeable,
- Some Responses Maximize the Elderly's Benefit,
- Social Desirability is highly Correlated with age,
- Case Manager must Monitor for Attitudinal Changes or Responses that are a Function of a Situation,
- Fluctuations Resulting from Environmental Factors, i.e., Fatigue.

VALIDITY RISKS

- Difficult to Maintain Constant Environment,
- Lack of Concrete Definitions on Some Functional Topics such as Independence,
- Is Time Window Under Consideration Representative of Person's Competence (effect of illness or medication),
- Different Construct with Elderly than Younger Adults.

COMMON PROBLEMS IN MEASURING SOCIAL FUNCTIONING

- Roles of Family Members Deviate in Different Subgroups,
- Role Expectations are not well Defined,
- Family Relationships Dictated by Customs,
- Difficult to Obtain Picture of Desired Quantity of Social Contacts,
- Need to Maintain Awareness of Diminished Social Contacts,
- Different Generations View Social Functioning Differently,
- Self-Reports have Limits.

ACTIVITIES OF DAILY LIVING (ADLs)

- Bathing
- Dressing
- Toileting
- Continence
- Transferring in/out Bed/Chair
- Inside Mobility

INSTRUMENTAL ACTIVITIES OF DAILY LIVING (IADLs)

- Meal Preparation
- Housework
- Laundry
- Shopping
- Taking Medicine
- Transportation
- Money Management
- Use of Telephone
- Mobility Outside

EFFECTS OF BED REST

- Decline in Intellectual Performance
- Verbal Fluency Diminishes
- Loss in Ability to Discriminate Between Colors
- Distorted Perception of Time
- Sleep Patterns Change
- Possible Hallucinatory Experiences
- Balance Mechanisms lose Effectiveness
- Extended Reaction Time
- Alterations in Cardiovascular Functions
- Impact on Musculoskeletal System
- Accelerated Loss of Calcium
- Possibility of Pressure Sores

AGE-RELATED CHANGES AND SKIN (EPIDERMAL)

- The epidermis becomes thinner with age due in part to a decreased rate of cellular division. Fine wrinkles become more pronounced.
- A less flexible outer layer (stratum corneum) leaves the skin prone to cracking and fissuring.
- Absorption rates or the skin's permeability varies more in the elderly as a function of skin temperature and thickness per exact location.
- There is a decrease in the cells capable of producing the brownish-black pigment melanin.
- Pigment cells (melanocytes) group together, forming dark pigment plaques called "aging spots."

AGE-RELATED CHANGES AND SKIN (DERMAL)

- Alterations in Connective Tissue
- Collagenous Fibers become Larger
- Decrease in the Density of the Capillary Network
- Capillaries Become More Fragile, leaving the Elderly Susceptible to Bruise Marks
- Increase in Deep Wrinkles
- Reduction in the Number of Sweat and Sebaceous Glands,
- Decrease in the Number of Hair Follicles
- A Decrease in the Pigment in the Hair

AGE-RELATED CHANGES AND SKIN (HYPODERMAL)

Hypodermal Changes (subcutaneous tissues not part of Skin)

- **A general loss of fat from this connective tissue contributes to wrinkles.**
- **A loss of fat results in loss of padding. With a reduced blood supply, the bedridden elderly are subject to the development of pressure sores (decubitus ulcers).**

AGE-RELATED SKIN DYSFUNCTIONS

- Xerosis
- Pruritus
- Lentigo
- Acrochordon
- Senile Keratosis
- Seborrheic Keratosis
- Herpes Zoster
- Decubitus Ulcers - Pressure Sores
- Bullous Pemphigoid
- Skin Cancer

SUGGESTIONS FOR ACCOMMODATING AGE-RELATED SKIN CHANGES

- Avoid Extensive Sun Exposure
- Use Sunscreen when in the Sun (SPF 15 or higher)
- Use Good Nutritional Practices
- Use Good Exercise
- Pay Prompt Attention to Skin Changes
- Attempt to Maintain Room Humidity at above 40%

SUGGESTIONS FOR ACCOMMODATING AGE-RELATED SKIN CHANGES
(Continued)

- Use Mild Soaps when Bathing (example: Dove Soap)
- Wash with Soap only Once Daily
- Add Bath Oil to the Water
- Apply Moisturizer after Bathing
- Drink Adequate Amounts of Water
- Choose Clothing made of Soft Cottons or other Non-Abrasive Materials.

AGE-RELATED CHANGES AND NERVOUS SYSTEM

- Cells are lost, particularly in Frontal Areas
- Cells of non-nervous supporting tissue increase
- Old Nerve Cells change form
- Lipofuscin Accumulates with Age
- Biochemical Activity is Reduced
- Blood Flow is Reduced
- Purkinje Cells in the cerebellar cortex are lost with Age
- Putamen and Locus Ceruleus Neurons are reduced in Number

AGE-RELATED DISORDERS AND NERVOUS SYSTEM

- Insomnia
- Stroke or cerebrovascular accident
- Senile Tremors
- Parkinson's disease
- Huntington's disease
- Tardive Dyskinesia
- Herpes zoster (shingles) neuritis.
- Trigeminal Neuralgia
- Dementia: Multi-Infarct & Alzheimer's disease

AGE-RELATED CHANGES AND THE MUSCULOSKELETAL SYSTEM

- Reduction in Bone Mmass
- Bone Density is Reduced
- Calcium is Lost
- Amount of Collagen Fibers is Reduced
- Gender Differences
- Poor Nutritional Habits
- Cartilage Heals more Slowly
- Muscle is Lost
- Muscle Elasticity is Reduced
- Space between Vertebrae Decreases
- Calcium Absorption is Reduced
- Joint Lubrication is Reduced

AGE-RELATED DYSFUNCTIONS OF MUSCULOSKELETAL SYSTEM

- Arthritis
  - Osteoarthritis
  - Rheumatoid Arthritis
  - Gouty Arthritis
- Bursitis
- Osteomalacia
- Paget's Disease
- Osteoporosis
- Bone Tumors
- Diverticulitis
- Parkinson's Disease
- Myasthenia Gravis
- Back Pain

HINTS FOR CONSUMERS WITH ARTHRITIS

- Apply Heat to Affected Joints
- Use Aspirin for Osteoarthritis
- Reduce Weight
- Avoid Strenuous Activities
- Monitor for Symptoms of Depression
- Use Aids so as to Obtain Deep Sleep
- Use Devices that Assist with Self-Care
- In Severe Cases use Footrest at Bottom of the Bed
- Encourage Person to use Affected Joint
- Maintain a Good Muscular Structure

THERAPEUTIC INTERVENTIONS FOR PREVENTION OF OSTEOPOROSIS

- Maintain Desirable Level of Physical Activity
- Maintain Appropriate Postural Alignments
- Use Calcium Supplementation When Appropriate
- Use Estrogen When Appropriate
- Use Supplemental Vitamin D
- Use Fluoride Therapy

THE HEART AND AGE-RELATED CHANGES

- Reduction in the Number of Cardiac Muscle Cells
- Decrease in Various Myocellular Mitochondrial Enzyme Activities
- The Oxygen supply to the Heart is Reduced
- Increase in the Amounts of Fatty Tissue and Lipofuscin in the Heart
- The Heart Valves Tend to Thicken and Become more Rigid
- Calcification of the Valves
- Thickening, Hardening, and Lessened Elasticity of Walls of Blood Vessels occur

THE HEART AND AGE-RELATED CHANGES (Continued)

- The Aged Heart Contracts and Relaxes More Slowly
- Increase in Blood Pressure
- The period after Each Heart Beat is longer
- Occurrence of Ventricular Arrhythmias

THE HEART AND AGE-RELATED DISORDERS

- Hypertension
- Coronary Artery Disease
- Myocardial Infarction or Heart Attack
- Angina Pectoris
- Congestive Heart Failure
- Cor Pulmonale
- Stroke (cerebrovascular accident)
- Transient Ischemic Attack or small stroke
- Aneurysm
- Phlebitis
- Varicose Veins

PHASES OF CARDIAC CARE

Phase 1: Involved are activities which occur during hospitalization for an acute cardiac event. The major tasks during this phase of treatment include education of the patient and family, psychosocial Assessment, progressive ambulation, and necessary intervention.

Phase 2: This phase begins after leaving the hospital and lasts for twelve weeks. The major activity is a monitored exercise conditioning.

Phase 3: The last phase is a long-term maintenance program beginning immediately after completion of Phase 2. The program is usually not medically supervised and is community based.

COMPONENTS OF CARDIAC CARE

- **Physiological, with Focus on Medical and Surgical Management, Activity Counseling, and Nutrition.**
- **Psychosocial, with Focus on Emotional Responses to Heart Attack such as Anxiety, Depression, Coping with Stress, and Unhealthy Behaviors.**
- **Establishing Desired Outcomes focusing on Quality of Life from Living Independently.**
- **Educational Issues, also Involving Emotional Support for Those Handling the Crisis of Coronary Care. The Goals Should Enhance the Elderly Consumer's Understanding of Procedures and Medications as well as his or her Desire to Comply with a Comprehensive Rehabilitation Program.**

PHASES OF STROKE CARE

- Acute phase (first 48 hours)
  - Diagnosis and Stabilization
  - Creation of functionally oriented database
- Subacute phase (48 hours to 3 months)
  - Rehabilitation to maximize functional gains
  - Prevention of complication
- Chronic phase (3 months and beyond)
  - Maintenance of functional gains
  - Prevention of recurrent strokes

RESPIRATORY SYSTEM AND AGE-RELATED DISORDERS

- Chronic Obstructive Pulmonary Disease (COPD)
- Tuberculosis
- Pneumonia
- Emphysema
- Bronchitis
- Pulmonary Embolism
- Lung Cancer
- Immunization Against Influenza and Pneumococcus is Advocated

HEALTH FACTORS AND DIABETES

- Follow the Principles of the American Diabetes Association's Diet
- Practice good Foot Care
- Regular Eye Examinations
- Monitor for Urinary System Infection
- Medication Compliance
- Periodic Cardiovascular Evaluation
- Regular Physical Exercise

SUGGESTIONS FOR ASSISTING ELDERLY VISION

- Use of Large Letters (**Bold Face**)
- Use of Bright Colors or Contrast in Colors
- Use of Different Colors for Doors and Walls
- Reduction of Glare
- Increase Illumination Where Possible
- Utilization of Low-Vision Aids
- Use of Sunglasses or Visors
- Use of Talking Devices
- Use of Radio and Reading Services

SUGGESTIONS FOR MOBILITY AND BALANCE

- **Exercise**
  - **Improves Muscle & Joint Strength**
  - **Reduces Body Fat**
  - **Improves Posture**
  - **Increases Bone Mass**
  - **Maintains Reaction Time**
  - **Improves Blood Flow**
  - **Improves Confidence and Security in Movement**
- **Good Nutrition because the lack of Certain Nutrients has been Linked to Diseases Affecting Mobility and Balance**
- **Maintenance of other Senses; Vision, Hearing, and Touch all Provide Cues with Respect to Balance and Mobility**

CATEGORIES OF DEPRESSION

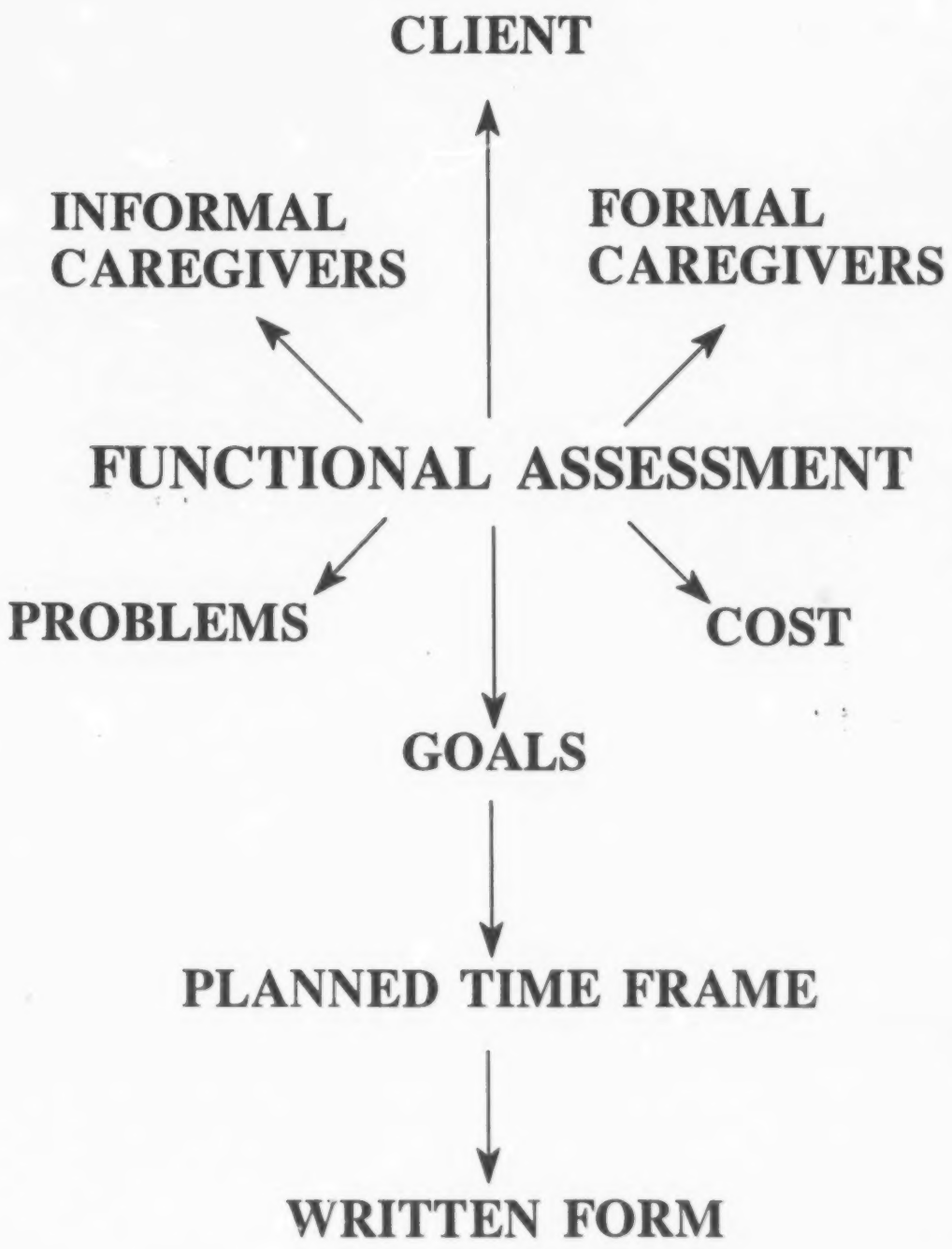
- Adjustment Disorder with Depression
- Dysthymic Disorder Consists of a Chronic Depressed Mood Existing for at least Two Years
- Major Depression Consists of an Acute Onset
- Dementia with Depression Consists of a Depressed Mood as the Victim attempts to Deny Memory Loss
- Organic Mood Syndrome

CRITERIA OF DEMENTIA

- Impairment of Intellectual Function
- Impoverished and Concrete Ideation
- Progressive Disorientation
- Memory Loss, Particularly of Recent Events
- Impaired Judgment
- Shallow Affect and Emotional Blunting

CARE PLANNING-WHAT IS IT?

CARE PLANNING PRINCIPLES



WHAT THE CARE PLAN PROCESS SHOULD INCLUDE

- **Build A Trusting Relationship and a Sense of Competence in the Consumer.**

- **Searching for, and Building on, the Person's Remaining Capacities. The Capacities should include Emotional Capacity, Awareness of and Responsive to Their Living Environment, Social Capacity, Capacity to Communicate, and the Capacity to make Logical Decisions.**

- **Look For Ways to Add Meaning to the Consumer's Life which Enhances Motivation for Self-Help.**

ESSENTIAL COMPONENTS OF THE CARE PLAN

- The Problem Statement
- Goal Statements
- Listing of Assets
- Listing of Barriers
- Intervention or Modality
- Clinical Impression or Diagnosis
- Review Date
- Names and Credentials

ADDITIONAL COMPONENTS OF CARE PLAN

- Desired Outcomes (objectives)
- What is to be done by the Consumer
- What is to be done by Family, Friends or Neighbors
- What is to be Done by the Case Manager
- What is to be Done by Other Workers in the Agency
- What is to be Obtained from Other Agencies
- What Events will Trigger a new Step in the Plan, Reassessment or a Revision of the Plan

RULES FOR WRITING EFFECTIVE GOALS

- Be Concise
- Be Consumer
- Use Action Verbs
- Specify Content
- Add Measurable Factors
- Use Modifiers
- Avoid Ambiguous Terms
- Use a Common Language

TYPES OF GOALS

- Improvement Goals
- Maintenance Goals
- Preventive Goals
- Palliative Goals
- Coping Goals